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ABSTRACT

This journal issue focuses on cooperative partnership programs for the improvement of educational services to students with disabilities. The eight articles are: (1) "Partner-Based Prelinguistic Intervention: A Preliminary Report" by M. Jeanne Wilcox (which found the intervention procedures had a strong effect on mother-child dyads); (2) "Helping Parents to Help Their Children" by Beth Dohrn, James Bryan and Tanis Bryan (which describes two pilot studies to increase the effectiveness of parent involvement stressing attribution training); (3) "Homework, Grading, and Testing: National Surveys of School District Policies" (Michael H. Epstein et al.); (4) "A Green Mountain Challenge: Assessing the Impact of School Reform on Children with Disabilities" by Pam Kay et al. (a Vermont effort at systematic educational reform); (5) "Partnerships Between Therapists, Parents, and Children" by Mary C. Lawlor and Elizabeth A. Cada (describing a University of Illinois project); (6) "Inservice Programs for Related Services Teams Serving Medically Fragile Children" by Forrest C. Bennett et al. (describing a demonstration project in Oregon and Washington); (7) "From Vision to Reality: The Opened Door" by Ruby Frazier (describing "Projects with Industry" in Lansing, Michigan) and (8) "Effective Consumer-Service Provider Interactions in Vocational Rehabilitation" (Thomas Czerlinsky and Shirley K. Chandler). All articles include references. (DB)

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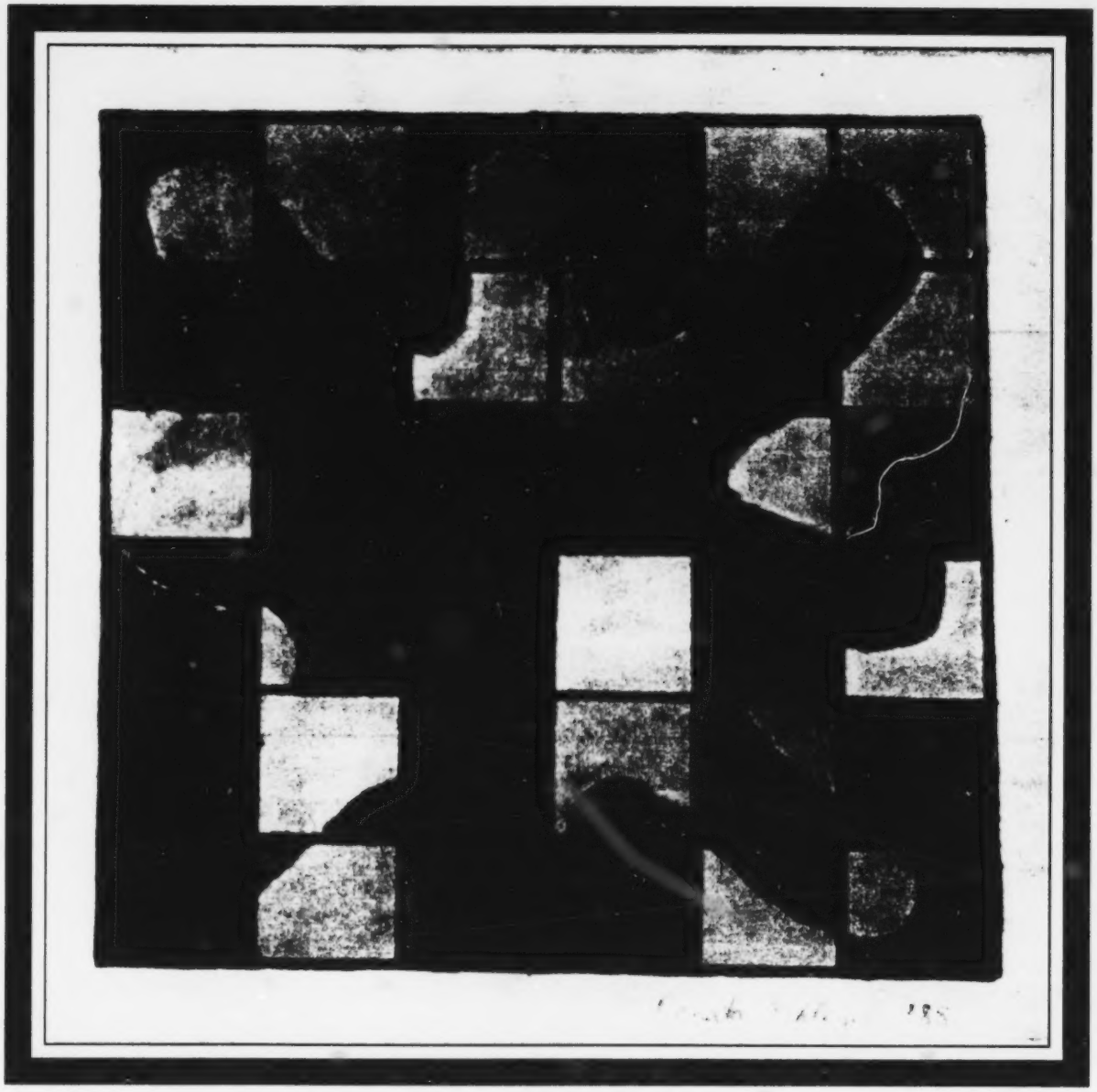

Renata Schlegel (1988)

Partnerships for Learning

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Partner-Based Prelinguistic Intervention: *A Preliminary Report*

M. Jeanne Wilcox, Ph.D.

Infant Child Communication
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Photo courtesy M. Jeanne Wilcox

A primary area of concern for many young children with developmental disabilities is initial communication or prelinguistic skills. Often, these young children demonstrate little or no language use. Although facilitation of language skills is an ultimate goal for many children, the more immediate intervention goal must focus on establishment of basic communication skills. Prior to use of first words, children have developed a rich system of nonsymbolic communication abilities. Further, it is apparent that these early communication skills (e.g., intentionally conveying a message to an interactive partner) formulate a necessary basis for initial language use. This is not to say that intentional communication abilities by themselves represent a sufficient condition of language acquisition. However, it is clear that we cannot expect a child to use language as a tool for communicating if he or she has not first learned to communicate. The first task facing many early interventionists providing services to young children with disabilities is often facilitation of intentional communication skills.

Communication, as the process by which meaning is conveyed during interpersonal interactions, is tied to the interactive context. Central to interventions designed to establish initial communication skills is consideration of facilitative parameters within the interactive context. The importance of the interpersonal environment to children's acquisition of intentional communication is widely acknowledged, both for children developing typically and those with developmental disabilities. Within the last decade, it has been repeatedly suggested that most developmental skill

Photo courtesy of Jeanne Wilcox

learning, including communication, can be viewed as deriving from child/adult social interchanges (e.g., Als, 1982; Bruner, 1977; Marfo, 1988; Snow, 1981; Wilcox, Kouri, & Caswell, 1990; Wilcox, 1992). Of particular importance to children's early development is exposure to social interchanges in which a caregiver/adult responds to a child's behavior in a responsive manner. Responsivity has been discussed by various authors (e.g., Lamb, & Easterbrooks, 1981; Rosenberg & Robinson, 1988) and refers to an adult's tendency to recognize children's behavioral cues and provide contingent, appropriate, and consistent responses to those cues.

Responsive partners have an important role to play in facilitating the emergence of children's initial communication skills. Children are born with basic communication abilities that can be characterized as partner-perceived, which means that a child's behavior is not produced with the intent of transmitting a specific meaning (e.g., request for something) to an interactive partner, but nonetheless the behavior is often perceived as meaningful by a partner. For example, a child may be unsuccessful at opening a container of small toys and an interactive partner perceives this as a context in which assistance can be offered and opens the container even though the child has done nothing that would indicate a specific request for assistance. Thus, during the earliest phase of communication development, children's communications are not purposeful from the child's perspective. Communication that occurs is a result of a partner's ability and tendency to attribute meaning to a child's nonsymbolic and frequently unconventional behavior.

Children gradually acquire the ability to produce intentional communicative behavior, i.e., that which is purposefully produced to transmit a specific message to an interactive partner. The emergence of this purposeful communication is marked by a child's deliberate attention to an interactive partner. For example, a child may "request assistance" by looking at an interactive partner, shaking a box that he or she cannot open, and looking toward the partner again. Children's initial intentional or purposeful communications are conveyed through nonsymbolic modes and include a relatively restricted range of meanings (e.g., request for assistance, request for attention). Gradually, through exposure to responsive partners, children expand the types of meanings they can convey and also start using symbolic modes (e.g., speech) for expression of those meanings.

The behavior of an interactive partner is central to facilitation of children's initial communication abilities, and a key aspect of partner behavior is sensitive responses to a child's behavior. A partner must consistently recognize a

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child's communicative or potentially communicative attempts and respond to those attempts in a contingent, appropriate, and consistent manner. In this way, a child comes to learn that his or her behavior has consistent and predictable environmental effects, a knowledge base that is regarded as essential to a child's ability to purposefully communicate (Snow, 1981; Wilcox et al., 1990). As the importance of children's interactive partners is increasingly recognized, especially for children who are presymbolic, the behavior of partners of children with disabilities has served as the focus of a variety of investigations and communication programming (e.g., Brookes-Gunn & Lewis, 1984; Cunningham, Reuler, Blackwell, & Deck, 1981; Hanzlik & Stevenson, 1986; Houghton, Bronicki, & Guess, 1987; Tannock, 1988; Wilcox et al., 1990). Numerous aspects of partner's interactive behavior have been examined with children with disabilities including general measures of interaction such as turn-taking and duration of joint attention as well as more specific measures of partner behavior (e.g., positive responses to compliant behavior, responses to child initiations) in relation to child behavior. Although there has been a fair amount of variation in results of such studies, an emerging concern is the fact that young children with disabilities may often be exposed to less than optimal responses from their communicative partners. For example, in an earlier investigation of partner responsivity to young children with developmental disabilities (Wilcox et al., 1990), comparisons were made with respect to the tendencies of children's mothers, early intervention teachers, and speech-language pathologists to recognize children's communicative or potentially communicative behavior. Results revealed that the partners typically disagreed in the identification of children's communicative behavior as well as their interpretations of potential meanings. It was concluded that many young children with disabilities, who are faced with the task of learning basic communication skills, may often be exposed to situations in which they are receiving inconsistent responses (across their typical interactive partners) to their potentially communicative behaviors. When this is considered in conjunction with the fact that young children with disabilities are typically enrolled in early intervention programs in which they have contact with multiple interactive partners (e.g., teachers and related services personnel), potential inconsistencies across these partners becomes a matter of concern. Wilcox et al. suggested that a viable intervention strategy might be one in which training focused on increasing the consistency of recognition and responses to children's communicative or potentially communicative behavior by a child's typical interactive partners. Therefore, the purpose of this research was to develop and test a partner-based intervention program of this nature and in the following sections of this article preliminary information regarding the procedures and outcomes is presented.

Method

Participants

Twenty-seven children, ranging in age from 16 to 38 months and their familiar interactive partners (mothers and their early intervention personnel including early childhood special educators, speech-language pathologists, occupational therapists, and physical therapists) were recruited for participation in this investigation. All children had a medical diagnosis of a general developmental delay and none were using language at the time of recruitment for participation in the research. Standardized testing included administration of the *Battelle Developmental Inventory* and all children scored at least 1.5 standard deviations below the mean in all assessed developmental areas (i.e., motor, cognitive, communication, personal-social, and adaptive). The *Sequenced Inventory of Communication Development* was also administered to all children, revealing delays in receptive and expressive communication skills that ranged from 6 to 22 months. Review of the children's medical records indicated auditory and visual acuity within normal limits. Baseline observations of the children while interacting in typical activities with each of the targeted interactive partners confirmed that, while some children produced occasional behavior that was judged as purposeful communication, their communicative interactions were predominantly preintentional in nature, i.e., the majority of communication that occurred was partner-perceived. Thus, all children were determined to be candidates for intervention with a focus on facilitating purposeful nonsymbolic communication skills.

The children were enrolled in one of four different early intervention programs in which they received educational and therapeutic (e.g., speech/language, physical therapy, occupational therapy) services. Two of the programs were designated as standard practice control sites, the remaining two programs served as sites for initial implementation of the experimental intervention procedures. This report is based on thirteen children and their interactive partners who participated in the experimental intervention condition and fourteen children and their partners who served as standard practice control participants.

Intervention Procedures

In recognition of the fact that communication is a dynamic process, the intervention procedures included a focus on both child and partner behavior within typical interactive contexts. Central to the design of the experimental program was the assumption that communication occurs during any interaction that may take place with a young child, irrespective of the specific focus of the interactive effort. In other words, it is not necessary for there to be a specific "communication" activity for a child to

Components of the Partner Training Program

Component One: Assessment

Focus: Identification of behavior perceived by a child's typical partners as communication.

Method: Each partner individually watches the same videotaped segment of caregiver-child interaction and specifies, from his or her perception, when communication occurs as well as the child's behavior and its associated meaning.

Component Two: Sensitivity Training

Focus: Increasing identification of targeted communication behavior and identification of opportunities for communication.

Method: Three group meetings with the partners and one individual "coaching" session with each partner while engaged in typical activities with the child.

Component Three: Contingency Training

Focus: Increasing the timeliness (within five seconds) and relatedness (attribute meaning matched to opportunity; model appropriate behavior and/or symbol) of responses to targeted child behavior.

Method: Two group meetings with the partners and two individual "coaching" sessions with each partner while engaged in typical activities with the child.

Component Four: Consistency Training

Focus: Self-monitoring and further enhancement of children's skills.

Method: Two group meetings with the partners and two individual "coaching" sessions with each partner while engaged in typical activities with the child.

learn basic communication skills. For example, a mother may be trying to get her child dressed. During this routine caregiving activity, communication per se is not the focus; however, communication between mother and child is certainly taking place, and even though dressing is the primary goal, there are still numerous opportunities for the child to learn about communication. Similar reasoning can be applied to early childhood education activities. Thus, the experimental intervention procedures can be conceptualized as those which were "overlaid" upon existing programming efforts. No attempts were made to alter any aspect of the children's ongoing program plans, and the children continued to receive educational and therapeutic services. Research staff had no direct contact with the targeted children. Rather, experimental efforts focused on training and monitoring of the children's typical interactive partners, defined as those who interacted with the children at least three times per week and had known the children for at least six months prior to the research.

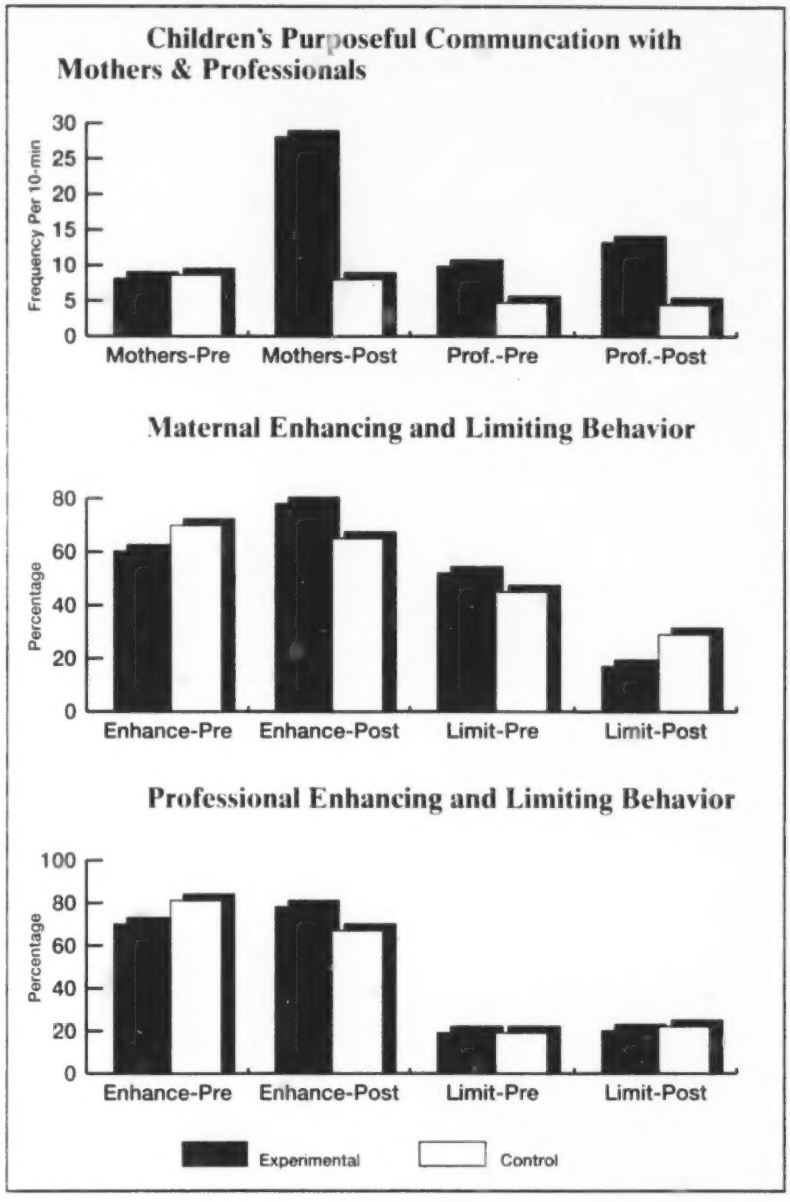
The primary goal of the partner training was to increase the sensitivity, consistency, and contingency of partner responses to children's actual and potential communicative behavior within the context of whatever caregiving, educational, or therapeutic activities the partners would typically conduct with the children. The intervention protocol consisted of four major partner training components that took approximately six months for the partners to complete. The training procedures included a combination of individual and group meetings for the targeted partners Table 1 provides an overview and brief description of the program components. As can be seen, the initial component was designed to gather information regarding the partner's perception of children's communicative behavior. This information served as the basis for determination of areas of consistency and inconsistencies among the partners and ultimately resulted in the identification of specific child behavior(s) that would be targeted for facilitation efforts. The second component had a primary focus on increasing the partners' abilities to recognize targeted child behavior as well as strategies for creating opportunities for communication. The third component focused on establishing contingent partner responses to targeted child behavior, and the fourth component had a primary focus on consistency of partner responses (both within and across partners) as well as strategies for further enhancement of children's emerging communication skills.

Pre- and Post-Intervention Measures

Videotaped samples were obtained immediately prior to and immediately following partners completion of the intervention program for experimental and standard practice participants. These samples at each measurement point (i.e., pre- and post-intervention) included two 20–30 minute tapes of each child interacting with his or her participating partner in typical activities. Thus, there were a total of 50–60 minutes of observation for each child interacting with his or her partner for each of the measurement points. Teacher-child samples were obtained during a classroom activity of the educators' choice, and samples of children interacting with their physical, occupational, and speech/language therapists were obtained by recording a scheduled treatment session. Mother-child samples were obtained in the children's homes during a free play activity.

These tapes were reviewed for the purpose of obtaining information regarding child and adult behavior. Child behavior measures included identification of all occurrences of purposeful communication, defined as those instances in which the child looked at the interactive partner and produced additional behavior (e.g., reach, vocalization, alternating looks) for the purpose of requesting an object or activity or for the purpose of directing the partner's attention to a particular event. In addition to purposeful communication, behavior that did not meet criteria for purposeful communication but occurred in an "assistive context" was also noted. Assistive contexts were defined as those instances in which there was an opportunity for the adult to interpret a child's behavior as either a request for an activity, object, or attention.

Measures of partner behavior focused on descriptions of adult reponses to the children's purposeful communication as well as behavior that was not purposeful but occurred in an assistive context. Partner responses were categorized as enhancing, limiting, or neutral. Enhancing responses included those regarded as facilitating for children's communication and were identified as instances in which the partners demonstrated (a) compliance with purposeful requests, (b) compliance with perceived child requests, i.e., those behaviors produced in assistive contexts, or (c) acknowledgement (in the absence of compliance) for both purposeful and perceived requests. Limiting responses were those regarded as less than optimal with respect to facilitation of children's communication skills and included instances in which the partners (a) ignored children's behavior, (b) attempted to redirect a child's attention to an activity or object that was not consistent with the child's purposeful communication or the assistive context, and (c) verbal directives that were not related to the ongoing activity. Excluded from the limiting category were those instances in which the partners attempted to redirect child behavior they regarded as inappropriate. Neutral behavior was regarded as neither facilitative nor limiting and predominantly included instances in which the partners could discern no clear child intent or opportunity for compliance and responded with requests for additional information (e.g., "What do you want?", "Huh?", "Could you show me?")



Results And Conclusions

Figure 1 displays the results to changes in children's purposeful communication for the experimental and standard practice control groups. Due to variances in observation time and, therefore, opportunities to communicate, the frequency of the children's purposeful communications was calculated per 10 minute observation units at

each measurement point. Data for the children while interacting with the professionals was collapsed across discipline groupings due to the fact that not all children had all categories of professional partners. Statistical analyses indicated that while experimental and control group participants demonstrated equal abilities during pre-intervention measures with their mothers, the experimental children demonstrated significantly greater amounts of purposeful communication post-intervention. No significant changes were noted for either group of children while interacting with their professional partners.

Figures 2 and 3 display information regarding changes in the partner enhancing and limiting behavior. Again, data for the professional partners was collapsed across disciplines. Statistical analyses revealed significant changes in the experimental mothers' behavior, and as can be seen in Figure 2, demonstrated an increase in enhancing behavior and a decrease in limiting behavior. No significant changes were noted for the standard practice control mothers. Similarly, no significant differences or changes were noted in the behavior of experimental and standard practice professional partners.

When comparing pre- and post-intervention data across the experimental and standard practice mother-child dyads, it is apparent that the intervention procedures had a strong impact on these experimental dyads. While the standard practice dyads made essentially no change from pre- and post-intervention, dramatic changes were seen in the children's purposeful communication while interacting with their mothers. In turn, mothers demonstrated a significant increase in their enhancing behavior and a significant decrease in their limiting behavior. This suggests an important relationship between maternal enhancing behavior and children's emerging skills with respect to purposeful nonsymbolic communication, and these preliminary findings attest to the efficacy of the partner training procedures for the mother-child dyads.

Unfortunately, similar trends were not observed for the professional partner-child dyads. The results indicated minimal changes in child or partner behavior. Experimental partners demonstrated essentially equal amounts of enhancing and limiting behavior from pre- and post-intervention, and the experimental children demonstrated only a slight, nonsignificant increase in their purposeful communications with these partners. Standard practice control partners demonstrated a slight decrease in enhancing behavior and a slight increase in limiting behavior but both changes were insignificant. Standard practice control children demonstrated no change in their purposeful communications with their professional partners. It would appear that the intervention program had minimal to no impact on the professional partner-child dyads.

At this point, it is unclear why the intervention procedures had such a minimal impact on the professional partners. One possibility is that the professionals' levels of production of enhancing behavior were high at the pre-intervention measurements. It may be that there was little room for improvement. However, the children were certainly capable of demonstrating improvement and the patterns observed in changes in the maternal-child dyads suggest that the minimal change observed in the children's communication abilities may be in part attributable to the minimal changes made by the professionals in their responsivness to the children. Certainly these are issues that continue to serve as a focus for ongoing investigative efforts. Other ongoing efforts include further examination and validations of the intervention protocol for young children and their mothers and further examination of potential impacts on professional partners' behavior through modifications of intervention procedures. Additionally, the longer-term outcomes of the prelinguistic intervention programs are being evaluated for all participating children.

References

Als, H. (1982). The unfolding of behavioral organization in the face of biological violation. In E. Tronick (Ed.), *Social interchange in infancy: Affect, cognition, and communication* (pp. 125–160). Baltimore: University Park Press.

Brooks-Gunn, J. & Lewis, M. (1984). Maternal responsivity in interactions with handicapped infants. *Child Development, 55*, 782–793.

Bruner, J. (1977). Early social interaction and language acquisition. In H. Schaffer (Ed.), *Studies in mother-infant interaction* (pp. 271–289). New York: Academic Press.

Cunningham, C., Reuler, E., Balckwell, J., & Deck, J. (1981). Behavioral and linguistic developments in the interactions of normal and retarded children with their mothers. *Child Development, 52*, 62–70.

Hanzlik, J. & Stevenson, M. (1986). Interaction of mothers with their infants who are mentally retarded, retarded with cerebral palsy, or nonretarded. *American Journal of Mental Deficiency, 90*, 513–520.

Houghton, J., Bronicki, G., & Guess, D. (1987). Opportunities to express preferences and make choices among students with severe disabilities in classroom settings. *Journal of the Association for Persons with Severe Handicaps, 12*, 18–27.

Lamb, M. & Easterbrooks, M. (1981). Individual differences in parental sensitivity: Origin, components, and consequences. In M. Lamb & R. Sherrod (Eds.), *Infant social cognition: Empirical and theoretical considerations* (pp. 127–153). Hillsdale, NJ: Erlbaum.

Marfo, K. (Ed.) (1988). *Parent-child interaction and developmental disabilities: Theory, research, and intervention*. New York: Praeger.

Rosenberg, S. & Robinson, C. (1988). Interactions of parents with their young handicapped children. In S. Odom & M. Karnes (Eds.), *Early intervention for infants and young children with handicaps* (pp. 159–178). Baltimore: Paul H. Brookes.

Snow, C. (1981). Social interaction and language acquisition. In P. Dale & D. Ingram (Eds.), *Child language: An international perspective* (pp. 195–214). Baltimore: University Park Press.

Tannock, R. (1988). Control and reciprocity in mothers' interactions with Down syndrome and normal children. In K. Marfo (Ed.), *Parent-child interaction and developmental disabilities: Theory, research, and intervention* (pp. 163–180). New York: Praeger.

Wilcox, M., Kouri, T., & Caswell, S. (1990). Partner sensitivity to communication behavior of young children with developmental disabilities. *Journal of Speech & Hearing Disorders, 55*, 679–693.

Wilcox, M. (1992). Enhancing initial communication skills in young children with developmental disabilities through partner programming. *Seminars in Speech & Hearing, 13*, 194–212.

Helping Parents To Help Their Children

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Introduction

The concept of parents as participants in the process of educating children with disabilities was implicit in the Education of the Handicapped Act of 1975, now titled the Individuals with Disabilities Education Act. With the expectation that parental involvement aids children's academic achievement, various programs have been developed to help parents develop proper management techniques. The primary focus of these programs has been on increasing parents' skills in behavior management, with little or no emphasis on training parents to work academically with their children. Currently, little reliable data exist to relate positive changes in the parents or children as a result of participating in parent training programs (Dembo, Sweitzer, & Lauritzen, 1985; Patterson, Chamberlain, & Reid, 1982).

The purpose of this paper is to describe two pilot studies focused on

increasing the effectiveness of parent involvement in the education of children with disabilities. The basic assumptions underlying the program were that: (1) parents need help in how to go about instructing their children; and (2) parents instruction should be carefully coupled with contingent attribution feedback that helps children acquire adaptive self-concepts. The program extends the results of laboratory research on attribution training to a model in which parents are trained to teach their children academic materials while interpreting their children's performance in ways that build children's beliefs in their abilities. Parents are coached to respond to their children's accurate responses on math exercises with statements relative to increasing ability and to their children's inaccurate responses with suggestions on how to solve the problem. The impact on parents' attitudes and beliefs in their children's abilities and the children's beliefs about themselves are assessed as a measure of program effectiveness.

Attributions

Imagine that you receive a low grade in a course. How do you explain this? What do you say to yourself? People differ in their notions about the causes of their experiences. In turn, notions about causes influence expectancies regarding future outcomes. These expectancies then influence the decisions people make. Some people attribute a low grade in a course to a lack of ability; others attribute it to not working hard enough. Still others may believe that the teacher did a poor job of teaching, or that the exams were too difficult or unfair. People who interpret the bad grade to mean that they lack ability are less likely to expect to be successful in the future on similar course work than are people who attribute the poor grade to a lack of effort or to teacher ineptitude. The results of a large body of research suggest that people who attribute failure to lack of effort or other external events, rather than to a lack of ability, tend to have self confidence, are more willing to engage in cognitively challenging tasks, and persevere when tasks become difficult. In contrast, people who do not believe they have the ability to influence outcomes are more likely to withdraw from or to avoid cognitive challenges. "Self efficacy judgements, whether accurate or faulty, influence choices of activities and environmental settings... People avoid activities that they believe exceed their coping cabilities, but undertake and perform assuredly those they judge themselves capable of doing" (Bandura, 1982).

There is a sizable data base demonstrating that in contrast to higher achieving classmates, children with learning disabilities: (1) tend to hold lower self-concepts about academic performance, even in areas where they have had little experience; (2) have less optimism about improving their performance in the future, even when they receive special education services; (3) tend not to attribute learning to ability; yet (4) tend to attribute failure to lack of ability. These maladaptive beliefs have been correlated with school performance, achievement, and self-concepts (Pearl, Bryan, & Donahue, 1980; Schunk & Cox, 1986).

Children acquire beliefs about themselves through three primary sources. First, children's experiences influence their self-concepts. Children who experience failure, especially if the failure is experienced early and/or is extensive, tend to acquire negative views about their abilities. Second, children's beliefs are influenced by the models presented by parents, teachers, and peers. Third, children get feedback about their performance from parents and teachers that shapes their self-views. Of importance here is that parents of children with learning disabilities tend to hold views about their children that mirror those views held by the children. Mothers of students with learning disabilities attribute their successes less to ability and more to luck, and their failures more to lack of ability and less to bad luck than mothers of achieving students (Pearl & Bryan, 1982). Parents of adolescents with learning disabilities have lower academic expectations for their children, and parents of students with learning disabilities report more negative and fewer positive reactions to their children than mothers of achieving students (Chapman & Boersma, 1979; Tollison, Palmer, & Stowe, 1987). In sum, parents' perceptions of children and adolescents with learning disabilities tend to be negative and congruent with those of their children. Thus, both the experiences of school difficulties and parents' interpretations of children's performance render students with learning disabilities at risk for the acquisition of maladaptive self referent beliefs.

Attribution Training

Given the important influence of attributions on expectancies and behavior, efforts have been made to help children with LD acquire adaptive self referent thinking. In these studies, the basic procedure has been to engage the child in an academic task. While doing the task, the child is given interpretive feedback about the causes of his or her performance, and encouraged to make the same interpretations. Some studies focused on effort feedback ("You've been working hard."); others on ability feedback ("You're good at this."), and others blended the two (cf., Schunk, 1984; Borkowski, Wehying, & Carr, 1988). The results of these studies have shown that children given attribution feedback, particularly ability feedback, combined with teaching particular task strategies, persist longer, acquire adaptive attributions about their performance, and make greater academic achievement gains than children not given such training.

In light of the promising outcomes of laboratory studies, we have been involved in translating this methodology into parent-child activities that can be done at home. Given the consistent

finding that parents' perceptions of children are related to children's acquisition of self-efficacy, an intervention that changes parents' beliefs about their children's performance would seem a critical component to efforts to help parents help children with disabilities. In our studies, parents are trained to use Family Math activities with their children. In the course of using Family Math activities, parents are trained to be attribution coaches. Consistent with the laboratory attribution studies, parents are coached to use ability and effort attributions in response to their children's accurate task responses and strategy suggestions in response to their children's inaccurate task responses. Our hypothesis is that the use of attribution and strategy responses in the context of doing academic tasks will lead parents to adopt these beliefs about the children and children to adopt them for themselves.

Pilot Studies Methods and Outcomes

The first pilot study was conducted in a private day school for students with learning disabilities. Mothers able to attend weekly sessions were assigned to an attribution plus strategy training condition. Mothers unable to attend served as a no-treatment control group. There were five mothers in the training group and four in the control group. In the attribution training condition, each session began with a 15-minute period in which mothers met with a graduate assistant. Mothers reviewed the math activities to be done that day and were coached to make ability and effort statements in response to their child's accurate responses on the task, and strategy statements in response to their child's errors. Table 1 provides examples of ability/effort and strategy statements.

Following the parent coaching session, parents and children met together in a room that had six work stations. A different activity was set up at each station. The activities were taken from the Family Math program (Stenmark, Thompson, & Cossey, 1986). The Family Math program was designed to provide parents with math materials they could use at home; activities that would be fun to do with family members. The activities are designed to develop problem-solving skills and to build an understanding of math using materials that are "hands-on." The activities involve estimation, measurement, word problems and logical reasoning, numbers and operations, probability and statistics, time and money, geometry and spatial thinking, patterns and number charts, and calculator usage. An example of an activity is the Venn Diagrams. The mother-child dyads made a Venn Diagram on a large piece of paper and chose characteristics that people will and will not have alike. Then they signed their names in the circle that was true for them (e.g., "I live in Illinois." in the outer circle and "I live in Chicago." in the inner circle). Another activity, Perfect People, involved measurement. Dyads cut a piece of string to the height of their partners, and used their own string to find out if they were a "tall rectangle," a "short rectangle," or a "perfect square." The directions explained how to measure and the parents and children recorded their responses on a chart. The activity then explored the circumferences of different body limbs. The Family Math program can be adapted to different age and ability levels; and the materials include items found around the home or school or purchased inexpensively.

The mother-child dyads spent 20 minutes working at each station, rotating and completing three activities during each session. At the end of the session, the dyads had treats, the children

Suggested Responses to Child's Accurate Task Responses

You're doing great on this _____(task).

You're an excellent student at doing _____(task).

I can tell you're talented at this sort of thing.

You have the skills it takes to do _____ (task).

You're really trying hard to _____ (task).

You're really getting smart at _____ (task) because you're working hard.

You're really putting a lot of effort into _____ (task).

Suggested Responses to Inaccurate Responses

Can you think of another way to do this?

Try to read aloud the word, it might help.

Let's go one by one.

Let's go over it again.

This word (problem) is hard, try to look for a clue.

Maybe we can sound out the word.

You almost got it.

See if you can find the answer in the story.

worked on calculator skills, and the parents had a brief wrap-up meeting to discuss how the session went, and how they might use the attribution and strategy statements at home.

The assessment of program impact included pre- and post-session measures of parents' attributions about their children and children's attributions about themselves. Using pretest scores as covariates, post-test analyses found that mothers in the attribution training condition perceived their children as better on academics, behavior, and social skills than parents in the no-treatment control condition. Children in the attribution training group were more likely than children in the control group to attribute their successes to ability and their failures to a lack of effort.

In the second pilot study, parents and children were drawn from an inner city school in Chicago. Participants were African American, from low socioeconomic backgrounds, and the children had been nominated by teachers as being at-risk for referral to special education. Seven parents willing to attend weekly sessions were assigned to either an attribution plus strategy training condition, or to a strategy-only condition. Four parents were to serve as a no-treatment control group, but these parents did not complete the post-test and were dropped from the analysis.

The procedures and training of parents in the attribution plus strategy condition were identical to those used in the first pilot study. In the strategy only condition, parents were coached only on how to respond to their child's errors. The pre- and post-test measures and the materials used in training were otherwise the same as in the first pilot study.

Pre- and post-test measures found parents in the attribution plus strategy training condition perceived their children as doing better on behavior, physical appearance, and athletic ability than parents in the strategy only condition. Children in the attribution plus strategy condition perceived their successes to be due to effort more than children in the strategy only condition who were more likely to attribute their failure to lack of ability.

The results of the two pilot studies suggest that parents can be coached to help their children with academic tasks and to interpret their children's correct and incorrect responses with attribution and strategy statements. Further, the results support the notion that engaging in academic activities while making such statements may lead parents to hold more positive perceptions of their children's behavior and, therefore, improve children's own beliefs about the causes of their successes or failures. The children in the two pilot studies differed in terms of their academic status, and the parents and children in the pilot studies differed on several demographic variables. Nonetheless, it must be noted that the samples of parents in these pilot studies were very small, and the results need to be replicated with larger samples of parents. There is much yet to be learned, and more research is necessary to establish the reliability of these findings. At this point, the results of this effort to translate laboratory research into a parent coaching model is very promising. On this basis, Table 2 presents suggestions for professionals who may wish to help parents work on academic tasks with their children, or for parents who might wish to follow up themselves.

Conclusions

The results of laboratory research and the pilot studies suggest that the goal of having parents involved in the education of children with disabilities could be realized. However, parents, like preservice teachers, need help on how to teach if they are to try to help their children with academic tasks. In addition, we are advocating that parents help their children interpret their performances in ways consistent with attribution training research. In our studies, parents were willing and able to help their children interpret their successes as indications that they are

Suggestions for Parents

1. Identify curriculum that the child needs help with. Hands-on activities that are fun and interesting and that the parent feels comfortable doing are likely to work best. Drill and practice activities using flash cards, word recognition, and basic math facts may be easy to implement and helpful to the child.

2. Get organized and help the child get organized. Gather all the materials to be used and saved in folders. Have the folder contain lesson directions written in a format that will be comprehensible to each participant. The folder can be used to store: lesson directions, family activities, scratch paper, reminders about attribution, and strategy statements that should be used when parent and child are working together.

3. Help your child with step-by-step assistance on the lesson. Go through each step of the lesson providing a model of the correct way to go about solving the problem, and give the child an opportunity to practice.

4. Help the child interpret accurate responses as indications of increasing ability and effort on that task. Be specific in making the statements specific to the task at hand. Encourage the child to make the same attributions. Keep track of each attribution response you make, or have the child keep track.

5. Focus the child on strategies for problem solving when the child gets stuck and does not know how to proceed. Have the child brainstorm strategies that could be used. Be sure to review strategies at the end of the session and at the beginning of the next session.

indeed getting smarter as they learn new skills. We cannot overstate the importance of having children with (or without) disabilities interpret their own positive experiences in ways that build their self-confidence. Rather than believe that their successes are the results of someone being nice to them, of giving others credit for the good things that happen to them, the attribution of increasing ability is likely to build the child's self-confidence. It is equally important to help the child interpret a lack of success as a function of not using the correct strategy. Rather than assuming that they are dumb, directing their attention to a strategy, or a search for a strategy, gives the child an adaptive response to failure. By connecting these interpretations with specific tasks, we help children focus on what is to be learned and how to go about learning it. The combination of academic instruction and attribution training is likely to have a more powerful impact on the child's learning and the child's feelings of self-worth than simply providing help in academics.

Photo by David Snyder

References

Bandura, A. (1982). Self-efficacy in human agency. *American Psychologist, 37*(2), 122–147.

Borkowski, J.G., Wehying, R.S., & Carr, M. (1988). Effects of attribution retraining on strategy-based reading comprehension in learning disabled students. *Journal of Educational Psychology, 80*(1), 46–53.

Chapman, J. & Boersma, F. (1979). Academic self-concept in elementary learning disabled children: a study with the Student's Perception of Ability Scale. *Psychology in the Schools, 16*, 201–206.

Dembo, M.H., Sweitzer, M., & Lauritzen, P. (1985). An evaluation of group parent education: Behavior, PET, and Adlerian programs. *Review of Educational Research, 55*(2), 155–200.

Patterson, G.R., Chamberlain, P., & Reid, J.B. (1982). A comparative evaluation of a parent-training program. *Behavior Therapy, 13*, 638–650.

Pearl, R. & Bryan, T. (1982). Mothers' attributions for their learning disabled child's successes and failures. *Learning Disability Quarterly, 5*, 53–57.

Pearl, R., Bryan, T., & Donahue, M. (1980). Learning disabled children's attributions for success and failure. *Learning Disability Quarterly, 3*, 3–9.

Schunk, D.H. (1984). Sequential attributional feedback and children's achievement behaviors. *Journal of Educational Psychology, 76*, 1159–1169.

Schunk, D.H. & Cox, P. (1986). Strategy training and attributional feedback with learning disabled students. *Journal of Educational Psychology, 78*(3), 201–209.

Stenmark, J.K., Thompson, V., & Cossey, R. (1986). *Family Math*. University of California, Berkeley.

Tollison, P., Palmer, D.J., & Stowe, M.L. (1987). Mothers' expectations, interactions, and achievement attributions for their learning disabled or normally achieving sons. *Journal of Special Education, 21*(3), 83–93.

Homework, Grading, and Testing: *National Surveys of School District Policies*[1]

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Public education has experienced a long and turbulent history of criticism and reform focused on virtually every aspect of its service to children and adolescents. But perhaps at no other time has the American educational system come under closer scrutiny than during the 1980s and early 1990s as professionals, business leaders, politicians, and parents call for improving the quality of education at all levels. A series of national commissions and reports were particularly strident in their support for major changes in the system (e.g., National Coalition of Advocates for Students, 1985; National Commission on Excellence in Education, 1983). A central focus of many

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of these criticisms was an increased commitment to educational rigor. Specifically, reformers called for the need to raise standards and increase accountability, heighten expectations for student performance, increase instructional time through efficient usage and/or extended school years, assign more homework, reform and restructure teacher education, promote home-school partnerships, and encourage communities to hold schools more accountable (Michaels, 1988; Westbury, 1984).

Led by urgent calls for the integration of students with disabilities into general education classes, a reform movement in special education also began in earnest in the mid-1980s. Specifically, the advent of the Regular Education Initiative (REI) (Will, 1986) increased the likelihood that students with disabilities will receive a significant portion, or all of, their instruction in the regular classroom. Indeed, several national reports have confirmed this outcome. It has been estimated that almost 80 percent of students with disabilities spend a portion of their day in an integrated setting, that approximately 50 percent of these students receive academic instruction in general education classes, and that secondary school students with disabilities receive about 60 percent of their academic credits in general education classes (U.S. Department of Education, 1990; Valdes, Williamson, & Wagner, 1990).

Educational researchers and teachers have expressed concerns about integrating students with disabilities at a time when the reform movement is pushing educators to raise academic standards in general education classes (Hocutt, Martin, & McKinney, 1990; Schumaker & Deshler, 1988). Three areas particularly affected by school reform are *homework*, *grading*, and *testing*. For example, the National Assessment of Educational Progress report found that by 1988, students of all ages were being assigned more homework than they had been at the time of the previous study only four

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years earlier (U.S. Department of Education, 1990). Further, the school reform movement has heightened attention for the need to evaluate student performance which may initially lead to the increased use of minimum competency testing and standardized testing in determining student advancement (e.g., Bodner, Clark, & Mellard, 1988).

Another key feature of the school reform movement has been an increased call for collaborative efforts between the school and families (Christenson, 1990). Of particular note is the fact that specific aspects of the reform movement are likely to have a direct impact on home-school interactions. With regard to this point, it is clear that the quality of home-school interactions will be influenced by the educational reform movement. For example, if higher school standards result in greater amounts of homework being assigned, then an increase in parental involvement in organizing and completing student work might be the result. Similarly, if high school diploma requirements are tied to certain test accomplishments, parents may find a greater need to monitor their child's secondary school performance. Unfortunately, it is unclear whether home-school interactions will be strained by the movement toward reform or whether they will evolve into more productive partnerships (Epstein, 1991).

A logical first step in analyzing these issues would be to examine school district policies. Indeed, the policies school districts have or do not have with respect to homework, testing, and grading could have a significant impact on students with disabilities to the degree that these policies govern actual school practices. Unfortunately, there are few data available regarding district homework, grading, and testing policies. The purpose of this project was to conduct a series of three surveys investigating the homework, grading, and testing policies in place at local school districts nationwide. The surveys, one each for testing, grading, and homework, used a common methodology, and generally focused on the following key themes:

(1) the extent to which school districts have a formal policy;
(2) the extent to which existing policies include modifications for students with disabilities;
(3) the specific features of the policies; and
(4) the methods of communicating the policies to teachers and parents.

Method

Subjects

A listing of all school districts that provide educational services (N = 15,713) was obtained from an index (i.e., Common Core of Data-Public Education Agency Universe, 1986–87) provided by the U.S. Department of Education. A stratified random sample was then selected according to three demographic criteria: (a) metropolitan status; (b) type of district; and (c) geographical location within the nine census regions of the country. A total of 550 school districts were randomly selected to participate in each of the three surveys.

Instrumentation

A separate survey was constructed to identify school policies in the respective areas of homework, testing, and grading. Items were derived from previous research in these areas and from a review of the literature. Each survey consisted of several different types of questions such as yes/no statements (e.g., "Does your school district have formal written policies and/or regulations on testing practices?"), more open-ended statements which required the respondent to identify all applicable responses (e.g., "What types of grades are included in your district's written policies and/or regulations for the elementary level?"), and a single most appropriate response (e.g., "How are parents informed about the district's homework written policies and/or regulations?").

After a prototype of each survey was drafted, a process of field review was established and implemented. School superintendents and administrative personnel and university researchers with knowledge and expertise on the topics were sent the surveys and asked to comment on their readability, comprehensiveness, and content. This provided a social validation for the scale as well as feedback for further revision. Each instrument went through several draft stages before the final version was completed.[1]

Procedure

A mailing label was created for each district in the sample (i.e., district name, address, city, state, zip code, agency, metropolitan status, and census division codes). The superintendent was the identified recipient, although the accompanying cover letter indicated that the superintendent could delegate the task of completing the survey to others within the district, provided that those individuals were knowledgeable about the district's policies in that area.

A packet containing a cover letter, a survey (either homework, grading, or testing), a request for results response card, and a self-addressed stamped envelope was mailed to each of the superintendents. After allowing approximately two to three weeks for responses to be received, a second mailing was sent as a reminder. A brief summary of the results of each of the surveys is presented below.[2]

Results and Discussion

Homework

A total of 267 (48.5 percent) school districts responded to the homework survey. The initial set of questions focused on whether or not they had a homework policy, and, if so, what were the features of this policy. A total of 94 of the 267 responding school dis-

tricts (35.2 percent) indicated that their district did have a policy. For those districts with a policy on homework, 73 (79.3 percent) indicated that the policy was recommended, while 19 (20.7 percent) indicated that it was required of teachers.

With respect to the question of whether policies allowed modifications for students with disabilities, a total of 58 (64.4 percent) indicated that their policy included modifications for students with disabilities. When asked for a description of these modifications, the most frequent comments indicated that (a) modifications were mentioned on the IEP (N = 14), (b) assignments should be consistent with the students' needs (N = 15), and (c) modifications were left to teacher discretion (N = 7). Respondents were also asked whether policies referred to assistive devices in the home (e.g., tape recorder, brailler) to help students with disabilities complete their homework. Eighteen districts (20.7 percent) indicated that their policies referred to such assistance.

The third issue of the survey focused on whether policies and regulations specified the frequency with which homework was to be assigned and the amount of time that was to be devoted to it per night. For those school districts that had policy statements in these areas, the average number of nights that homework is assigned ranged from 3.31 times per week at the elementary level to 4.28 times per week at the secondary level; the amount of time ranged from 41.5 minutes at the elementary level to nearly three times that amount at the high-school level (i.e., 1 hour 40.2 minutes).

The fourth issue involved the communication of homework polices to teachers and parents. Of the districts with a homework policy, almost all (91.1 percent) indicated that they informed parents about homework policies and/or regulations. A total of 53 district policies (58.2 percent) specified roles that parents were expected to assume in the homework process including providing a space at home (N = 43), monitoring task completion (N = 30), monitoring time allocation (N = 29), and assisting with work completion (N = 23). Responses to the question about how teachers are informed of district homework policies (N = 90) indicated that the most common method was through the distribution of district-wide (N = 15) or school (N = 16) handbooks or via faculty meetings (N = 16).

Finally, one question concerned the types of homework that should be assigned. A total of 45 (51.1 percent) district policies specified the types of homework that should be assigned. These included class preparation (N = 33), practice exercises (N = 35), completion of tasks (N = 34), and extension activities (N = 37).

Discussion. The results from the national survey provide evidence that about one third of school districts have a homework policy in place. Thus, it can be assumed that for most districts, homework practices are either governed by individual school policies or left to the discretion of teachers. The implication of having no policy, or a voluntary policy, is that practice will vary teacher to teacher. Thus, students with disabilities will need to be prepared for all types of homework demands, as will their parents. Additionally, teachers will need awareness training on the needs of students with disabilities and on how homework may affect these students and their families. Modifications or accommodations of policies for students with disabilities appear to be a common component of existing policies. Given the homework problems frequently faced by students with disabilities (e.g., Epstein, Polloway, Foley, & Patton, in press) and the potential benefits seen in homework for students identified as either having a disability or being low achieving (e.g., Heller, Spooner, Anderson, & Mimms, 1988; Keith, 1982), it is encouraging to discover that the importance of such modifications is apparently recognized.

The data on the frequency and amount of homework specified in district policies confirm trends observed subsequent to the national educational reform movements of the 1980s toward assigning more work and assigning work more frequently. Thus, the implications for teachers working with students with disabilities are clear that there needs to be increased focus on preparing these students for the rigors of the general education classroom. The data on parental roles in the homework process are quite consistent with the existing literature on home-school collaboration and reflect the fact that parents are increasingly expected to be involved with homework (Hallahan, 1992). Specifically, the policies recommend a supportive role for parents (e.g., provide sufficient space and time, monitor task completion, allocate a specific time period for homework) rather than suggesting that parents function as instructors or tutors (i.e., instruct specific skills). However, while the policies indicated a desire for a close home-school collaboration, the passive manner in which the policies were communicated may ultimately undermine the likelihood that understanding and implementing these practices will be achieved.

Grading

A total of 225 (40.9 percent) school districts responded to the grading survey. The initial cluster of questions focused on whether districts had a formal written policy on grading and several related questions. A total of 146 of the 225 respondents (64.9 percent) indicated that their district had a formal policy. Further, of those districts responding with a policy, 107 (78.1 percent) indicated that compliance is required for teachers and 30 (21.9 percent) indicated that it is recommended only.

A second issue concerned whether the policy included modifications for students with disabilities. Of the school

districts that had a general policy on grading, 88 (60.3 percent) also stipulated a policy for students with disabilities. A total of 57 commented on specific modifications. The most common practices involved modifications stated in the individualized educational program (N = 25), made by a committee (e.g., pupil evaluation team) (N = 6), and on student report cards (N = 6).

The third issue about grading policies focused on the types of grades and grading systems specified in the policy across grade levels. For types of grades, the most commonly used were letter grades, number grades, narratives, achievement scores, pass-fail, and checklists. With respect to grading systems, the most frequently cited were percentage cutoffs, individually referencing (student progress), multiple grades, criterion referencing, weighted grades, and shared grades.

The fourth grading issue concerned the communication of district grading policies to parents and teachers. Virtually all of the respondents (145; 99.3 percent) indicated that they communicated with parents regarding policies and that they did this primarily through the school handbook (N = 64), the district wide handbook (N = 11), or through multiple means. Grading policies were communicated to teachers most frequently via the school handbook (N = 27), district handbook (N = 27), faculty meetings (N = 22), and through multiple vehicles (N = 65).

Discussion. The results from the national survey indicate that some form of grading policy is in effect for a majority of local school districts. Thus, the issue of grading would seem to be important for many school districts. The findings related to policy statements involving modifications for students with disabilities are somewhat encouraging. Well over half of the districts with a stated grading policy noted that modifications for students with disabilities are included in the policy. The apparent commitment to grading modifications is particularly critical given research indicating that students with disabilities were passing mainstream classes but doing so in many cases with low GPAs (e.g., Donahue & Zigmond, 1990; Zigmond, Levin, & Laurie, 1985). While making grading modifications part of district policy may not guarantee that students will earn higher GPAs, nevertheless, it may contribute positively to such outcomes. In terms of the types of grades specified in district policies, a predictable

finding is the continued reliance on letter and number grades. As these grades are based largely on percentage cutoffs, such a system may place students with disabilities at a distinct disadvantage, especially, if the cutoffs reflect only normative standards. Positive aspects are the relative frequency with which narrative, individually referenced, and multiple grading systems are used. However, a disappointing finding is that shared grading systems, in which input from both special and general educators is used, was mentioned in only a few cases. Parents were clearly informed about policies, though it should be noted that, as in the case of homework, grading policies were communicated to teachers and parents using channels that could be termed less than direct.

Testing

A total of 214 (38.9 percent) school districts responded to the testing survey. The initial set of questions focused on the existence of a *testing* policy regarding standardized tests within the respective district. A total of 128 (59.8 percent) of the 214 respondents stated that they did have a formal policy. Further, of the 128 with a policy, 124 (96.9 percent) indicated that periodic administration of standardized tests was required by formal policies. Of those that required administration of standardized tests, 68 percent reported that testing is consistent with state policy, 40 percent reported that tests are given more frequently than is required by state policy, and 10 reported that there was not a state requirement on standardized tests. A total of 47 indicated that they did have a formal policy on nonstandardized testing.

The second area concerned whether the standardized testing policy included exemptions and modifications for students with disabilities. With regard to the matter of exemptions: 37 stated that all students with disabilities take all standardized tests (i.e., no exemptions); 13 stated that all students with disabilities take some standardized tests; 29 stated that some students with disabilities take all standardized tests; 61 stated that some students with disabilities take some standardized tests; and 30 stated that some students with disabilities take no standardized tests. Seventy-five districts identified how exemptions were granted. Decisions to exempt students with disabilities from standardized tests were made by IEP teams (N = 59), according to state policy (N = 32), by the special education teacher (N = 20), and at the district level (N = 18). Eighty respondents also acknowledged that their policy identified the specific disability groups that could be exempted from taking the tests. By category these include severe disabilities (N = 5), learning disability (N = 46), mild retardation (N = 44), multiple disabilities (N = 44), emotional/behavioral disorders (N = 42), visual impairments (N = 29), physical disabilities (N = 27), hearing impairments (N = 21), and speech/language disorders (N = 20). With regard to testing modifications for students with disabilities, 75 districts stated that their written policies and/or regulations required that modifications be made in the administration of standardized tests for students with disabilities. These included a special administrator (N = 62), the use of large print (N = 50), the use of aids/devices (N = 49), a special administration site (N = 49), and extended time (N = 48).

The third focus of the survey concerned policies involving the communication of standardized *testing* data; namely, whether the standardized tests results of students with disabilities were included in the district's test data set. Fifty-eight school districts indicated how they were used: 28 used scores as part of the test data set; 14 separated scores from the data set, and; 16 used scores as both part of and separate from the test data set.

The final focus of the survey was whether written policies/regulations specified how the results of the tests were to be used in the districts. The most commonly cited reasons by the 76 respondents were to explain student strengths and weaknesses to parents and students (N = 55), measure school district effectiveness (N = 54), fulfill state mandates (N = 54), and measure school building effectiveness (N = 51).

Discussion. The survey results indicate that a standardized testing policy is in place in a majority of local school districts. With respect to students with disabilities, a significant majority reported a policy on standardized tests that specified when exemptions were made and modifications were available. However, far fewer districts had a formal policy on guidelines regarding the use of nonstandardized or informal tests. The apparent difference between how districts address standardized and non-standardized testing practices appears to be related to the presence of state and/or local district mandates on standardized tests. Districts are more likely to have a formal policy in areas mandated locally or at the state level.

General Discussion

Although the content, sample, and results differed, a number of issues are common across the surveys. First, while the number of districts with a formal policy differed, it was interesting that so many districts did not have a written policy. Given the emphasis that school reform advocates have placed on homework, grading, and testing, and the fact that policies are reviewed on a regular basis, it seemed likely that a much greater number of districts would have updated their formal policies to include these areas. Moreover, in those districts with policies, the lack of attention by a substantial number of districts to students with disabilities indicates that the full implications and outcomes of the REI movement have not been completely addressed or planned for by education policy makers.

Second, the modifications and adaptations for students with disabilities as

present in formal policy can be viewed in both a positive and negative light. On the one hand, several districts addressed the needs of, or at least the presence of, students with disabilities and included descriptions of acceptable modifications in their policies. On the other hand, the modifications that were cited were few in number, did not appear to offer a continuum of alternatives, and, in many cases, were only suggestions and not required policy.

Third, the overwhelming majority of school districts recognized the need to communicate policy to the teachers who have to implement policy and to parents who are the consumers of the policy. Yet, a review of the procedures used to communicate to teachers and parents raise a number of concerns. Many of the procedures used to communicate with teachers are passive (e.g., teacher handbook, teacher contract); issues of teacher understanding, the ability of teachers to translate policy to practice, and other implementation issues remain open to question. In the case of parents, school handbooks and letters home were the preferred modes of communication. Research and actual practice will need to confirm if these less direct procedures sufficiently promote parental understanding and facilitate teacher-parent interactions, and thus enhance the home-school collaboration process that is central to the education of students with disabilities.

The results of the district policy surveys lead to several conclusions. Homework, grading, and testing policies should remain current and relevant to the fluctuating educational context. More specifically, framers and editors of policies should ensure that they specifically address the unique needs and challenges presented by students with disabilities as they are integrated into general education classrooms. Further, these policies should reflect the input of those who have a vested interest in seeing that they continue to serve students effectively including administrators, general and special education teachers, and parents. Given the widespread trend toward the inclusion of students with disabilities into the mainstream of education, it is essential that homework, testing, and grading policies governing educational policies accommodate their special needs. This will enable them to overcome obstacles ordinarily associated with homework, testing, and grading practices, and, thereby, help them attain higher levels of academic and social success. ♦

Footnotes

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[1]A copy of each of the surveys mailed to participants can be obtained by contacting the senior author. Michael H. Epstein, Special Education, Northern Illinois University, DeKalb, Illinois 60115.

[2]A more detailed report of each of the surveys can be obtained by contacting the senior author.

References

Bodner, J.R., Clark, G.M., & Mellard, D.F. (1988). State graduation policies and program practices related to high school special education programs. In *Graduation requirements, adult services, and the transition of students with handicaps* (ERIC Document Reproduction Service No. ED 304 825).

Christenson, S.L. (1990). Differences in student environments: The need to work with families. *School Psychology Review, 19*, 505–517.

Donahue, K. & Zigmond, N. (1990). Academic grades of ninth-grade urban learning disabled students and low-achieving peers. *Exceptionality, 19*, 505–517.

Epstein, J.L. (1991). Paths to partnership. *Phi Delta Kappan, 72*, 344–349.

Epstein, M.H., Foley, R.M., & Polloway, E.A. (in press). A comparison of the homework problems of students with behavior disorders and non-handicapped students. *Preventing School Failure*.

Epstein, M.H., Polloway, E.A., Foley, R.M., & Patton, J.R. (in press). Homework: A comparison of teachers' and parents' perceptions of the problems experienced by students identified as having behavioral disorders, learning disabilities, or no disabilities. *Remedial and Special Education*.

Hallahan, D.P. (1992). Some thoughts on why the prevalence of learning disabilities has increased. *Journal of Learning Disabilities, 25*, 523–528.

Heller, H.W., Spooner, F., Anderson, D., & Mimms, A. (1988). Homework: A review of special education practices in the southwest. *Teachers Education and Special Education, 11*, 43–51.

Hocutt, A., Martin, E., & McKinney, J.D. (1990). Historical and legal context of mainstreaming. In J. W. Lloyd, N. N. Singh, & A. C. Repp (Ed.), *The regular education initiative: Alternative perspectives on concepts, issues, and models* (pp. 17–28). Sycamore, IL: Sycamore Publishing.

Keith, T.Z. (1982). Time spent on homework and high school grades: A large sample path analysis. *Journal of Educational Psychology, 74*, 248–253.

Michaels, K. (1988). Caution: Second wave reform taking place. *Educational Leadership, 45*(5), 3.

National Coalition of Advocates for Students. (1985). *Barriers to excellence: Our imperative for educational reform*. Washington, DC: U.S. Department of Education.

National Commission on Excellence in Education. (1983). *A nation at risk*. Washington, DC: U.S. Department of Education.

Rosenberg, M.S. (1989). The effects of daily homework assignments on the acquisition of basic skills by students with learning disabilities. *Journal of Learning Disabilities, 22*, 314–323.

Schumaker, J.B. & Deshler, D.D. (1988). Implementing the Regular Education Initiative in secondary schools: A different ball game. *Journal of Learning Disabilities, 21*, 36–42.

U.S. Department of Education. (1990). *Twelfth annual report to Congress on the implementation of the individuals with disabilities education act*. Washington, DC: U.S. Printing Office.

Valdes, K.A., Williamson, C.L., & Wagner, M.M. (1990). *The national longitudinal transition study of special education students* (Vol. 1). Menlo Park, CA: SRI International.

Westbury, I. (1984). A nation at risk. *Journal of Curriculum Studies, 16*, 431–445.

Will, M.C. (1986). Educating children with learning problems: A shared responsibility. *Exceptional Children, 52*, 411–415.

Zigmond, N., Levin, E., & Laurie, T. (1985). Managing the mainstream: An analysis of teacher attitudes and student performance in mainstream high school programs. *Journal of Learning Disabilities, 18*, 535–541.

A Green Mountain Challenge: The Impact of School Reform on Children with Disabilities

It is the central task of restructuring to organize the learning environment so that . . . differences are not just overcome, but celebrated; and without the need and cost, both human and financial, of labeling, separating and discriminating.
(Vermont Department of Education, 1992, p. 2).

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Vermont's Agenda for School Reform

As in many other places around the country, the climate in Vermont schools is clearly one of change. Vermont, with a total population of only 562,758 in the latest census, has a K-12 public school population of less than 100,000, divided unevenly among 60 school supervisory unions. Vermont is considered to be one of the most rural states in the country and, with the Green Mountain range running down the middle of the state, it is often difficult to access.

In the late 1980s, the climate in the state was ripe for school reform. Special education child counts were increasing, the business community was calling for better-prepared graduates, and the legislature was seeking greater accountability in exchange for requests for increased state aid to education. Vermont needed a reform agenda that respected the state's long tradition of local governance of education, teacher autonomy, and progressive special education.

The State Board of Education involved more than 250 Vermont citizens in discussions about reinventing schools for high performance, and, in 1990, adopted the following four **Education Goals**:

Goal 1: Vermonters will see to it that every child becomes a competent, caring, productive, and responsible individual and citizen who is committed to continued learning throughout life.

Goal 2: Vermonters will restructure their schools to support very high performance for all students.

Goal 3: Vermont will attract, support, and develop the most effective teachers and school leaders in the nation.

Goal 4: Vermont parents, educators, students, and other citizens will create powerful partnerships to support teaching and learning in every community (Vermont Department of Education, 1990).

For the past two years, the map to reach these goals has been drawn through systemic reform efforts called **A Green Mountain Challenge**. As an action plan for the reform agenda, the Green Mountain Challenge involves efforts such as:

Defining what students should know and be able to do. Vermont's "Common Core of Learning" is a statewide consensus of the "vital results" and "fields of knowledge" that Vermont students need to be successful in the 21st century. A framework of curriculum standards, teaching/learning standards, and assessment standards is being developed and will be guided by the Common Core.

Measuring what students know and are able to do. A new statewide program of **performance assessment** centers on evaluation of portfolios of students' actual classroom work. The assessment program has begun with writing and mathematics at the fourth and eighth grade levels, and is strongly linked with teacher training. It has a dual purpose: to find out what students know and to improve instruction.

Helping educators get better at what they do. A state Professional Standards Board cooperates with newly developed Local Standards Boards to couple teacher licensure with a requirement that every teacher develop and implement an individual professional development plan.

Deregulating schools in exchange for performance. Schools that can demonstrate changes resulting in improved student performance can apply for waivers of regulations that are not governed by federal law or do not involve health, safety, or civil rights.

Rethinking school governance. A new, more efficient approach to school governance is being sought as an alternative to the many layers of administration that exist at the local and supervisory union levels.

Building the education-human services partnership. The State Department of Education and the Agency of Human Services are working together to strengthen the links between schools and those agencies that provide social work, health education, mental health counseling, and other social services improving the quality of life for children. Part of this effort focuses on young children and has been called "Success by Six."

Strengthening the partnerships between school and home and promoting new partnerships within the community. Schools and local business leaders are developing strategies to help schools ensure that students are connected through learning to home, to work, and to services in their communities.

Implementing special education reform. Services are to be provided to each student and teacher who needs them, usually in the regular classroom (Mills, 1993).

Special Education Reform

When the Vermont State Board of Education refers to "every child" in its first goal, most schools and parents understand that "every child" includes those with disabilities. Vermont has been a leader in the process of learning to meet the diverse needs of students in public schools. In the early 1970s, prior to the passage of P.L. 94–142, the Education for All Handicapped Children Act (since retitled the Individuals with Disabilities Education Act by the 1990 Amendments), Vermont schools first **integrated** classes for students with special needs. They then **mainstreamed** the students themselves, and are now working for **full inclusion** of these students.

During the 1989–90 school year, Vermont served 81.49 percent of children with disabilities ages 6-21 in the general education classroom. This was the highest percentage of any state in the country; the national average was 31.49 percent. The state also ranked first in its general education placements of students with specific learning disabilities (88.76 percent versus the national average of 20.7 percent),

serious emotional disturbance (62.82 percent versus 14.9 percent), hearing impairments (69.42 percent versus 27 percent), and orthopedic impairments (83.33 percent versus 29.61 percent) (U.S. Department of Education, 1992).

With the passage of Act 230 by the Vermont Legislature in 1990, special education became a full partner and a catalyst in mapping out the education reform agenda for the state. The primary goal of Act 230 was to increase the capacity of schools to meet the needs of **every** student through restructuring, comprehensive systems of service delivery, instructional support teams, and staff development. Three years later, there are some noticeable changes in the schools. There are instructional support teams in every school in which teachers engage in collaborative problem solving focused on student learning. Whenever possible, special education, Chapter I, and other remedial services are delivered in the general education classroom. Finally, staff development tends to focus on problem solving, integrating and adapting curricula, behavior, and crisis management (Kane, 1992).

As a result of these and other changes, special education enrollments across the state have dropped by more than 12 percent since 1989 (U.S. Department of Education, 1992). Many students who have been evaluated and found to have disabilities may not be labeled "eligible" for special education [services] because their school's comprehensive system of service delivery now has the ability to provide the services they need within the regular education classroom. These students are supported and accommodated in the general education classrooms, where their learning experiences are guided by the same curriculum as that of their peers. And students with disabilities participate in the same kinds of homework assignments and assessment processes as their classmates. The teachers who work with them may be special educators or Chapter I teachers who are team-teaching with the general education teacher in that classroom, alone or with instructional aides.

Although "Act 230 is not to be used as an excuse not to provide needed services or to make staff reductions because the special education count is lower" (Kane, 1992), change takes time, and not all school districts in the state are at the same stage in restructuring. Parents, teachers, and some of the students themselves are eager to know what the long-term impact will be of this particular aspect of Vermont's education reform.

Assessing the Impact of School Reform

In 1992, five rural communities in the northwest corner of Vermont, in cooperation with a research team from the Special Education Department at the University of Vermont, began a three-year inquiry into the impact of Vermont's school reform on families. Funded by the Office of Special Education and Rehabilitative Services (OSERS), the project's goal is to determine whether Vermont's education reform agenda can benefit students with disabilities and their families, and the climate of home/school collaboration for all students.

This descriptive study uses the personal perspectives of parents, teachers, and students as a lens to examine seven schools' implementation of Vermont's "Portfolio Assessment Program" and its potential impact on students with disabilities. Parent-teacher focus groups, student group interviews, personal interviews with parents and teachers, and action research logs kept by both teachers and parents are ongoing sources of data. At least two parents from each of the five communities are active, ongoing members of the research team as "Parent Liaisons." They play a very important role in keeping the team aware of community and parent concerns. These parents keep their own action research logs, meet to discuss education issues on a monthly basis, and have been very successful in recruiting other parents to participate.

One particular focus of this inquiry is the fourth and eighth grades in these schools, where the "portfolio system" is in use to assess academic performance in the areas of writing and math. The system consists of three sets of ratings: the portfolio, best piece, and a uniform assessment. The portfolio is a collection of student work, and includes a student-nominated "best piece," and the student's reflections on their reasons for choosing this work as their best. The uniform assessment for writing, used statewide in these two grades, is a timed, 90-minute written response to a prompt. The mathematics uniform assessment consists of a number of multiple choice questions and a few open-ended tasks tapping students' problem-solving abilities.

Classroom teachers assess their students' portfolios according to statewide criteria which were developed by a committee of Vermont teachers. Students are given the criteria and other information about the portfolio assessment process. Teachers are encouraged to use the work required by the portfolios as part of their regular program in the classroom.

To help students understand the criteria under which their work will be judged, they are given a series of questions to ask themselves and to discuss in conferences with their classmates and teachers as they review their work. For the Writing Portfolio, these are the questions: (1) Is my purpose clear? (2) Are the ideas or information ordered or structured effectively? (3) Does the use of specific detail add to clarity? (4) Does my writing exhibit a sense of personal expression, voice, or effective tone? (5) Does the final draft exhibit appropriate usage, mechanics, and grammar? For the Mathematics Portfolio, these are the questions: (1) How well do you understand the task or problem? (2) How do you solve the problem? What approaches do you take? (3) Why do you do what you do?

What decisions do you make as you work? (4) How well do you show your thinking using mathematical representations (charts, graphs, models, diagrams, manipulatives)? (5) How clearly do you present your work, your thinking, and your solutions? Is your presentation clear and organized?

Communicating Change to Parents

Both my husband and I put in a half hour each trying to figure out this problem. Now I know how my parents felt when they were trying to help me with "New Math!" (Parent of fourth-grader).

It is impossible to read the criteria for the portfolio assessment program without realizing that the curriculum and methods of instruction for both writing and mathematics have undergone some major changes. Communicating about the changes to parents has been one of the challenges for the teachers. In a statewide sample of twenty teachers who were surveyed about their participation in the portfolio assessment process, the majority of respondents reported making some attempts to let parents know about the portfolio program. However, only four talked about sharing portfolios with parents during conferences. Two others expressed the view that it was too early to share portfolio results with parents because it was not clear yet what it all meant (Biggam, 1992).

If this is going on, the parents should be notified that it is happening for two reasons. One, that's my child you're working with. It's my business what you are doing with her. Two, it's her education and if [teachers] want parents involved in their child's education, then they are going to have to reach out and touch them. Even more, they're going to have to try harder because the parents are getting less and less interested as the years go on. I see this with the high school kids especially. The parents don't come in at all even with an invitation. They feel intimidated, they're undereducated themselves; they just feel once they're in high school the kids are on their own (Parent of a fourth-grader who has disabilities).

Improving parent participation in education has been a consistent theme of policy analysts and change agents in both general and special education, and a consistent concern for parents and school personnel. Yet, it is difficult for teachers to explain to parents concepts that are very new to them as teachers.

When I think back on my own education, I wasn't taught to think . . . [about] problems, to solve them in a particular way. When I'm faced with those kinds of problems, even today, I feel like I can't do that. So I tell the kids that I'm not comfortable with this kind of problem either (Fourth-grade teacher).

Emerging Themes and Questions

The Vermont research project is collecting data throughout the 1992–93 school year; halfway through that year, the following themes are emerging:

(1) The Vermont Assessment Program is changing the way teachers teach. Classroom learning is becoming more interactive and interdisciplinary: students are increasingly focusing on problem solving and real-life applications of learning; they are demonstrating what they are learning instead of simply recording their learning on paper. Teachers say the Vermont Assessment Program has forced them to reflect on how they teach and to alter instruction to emphasize active and hands-on learning.

The portfolios themselves . . . it's just that it's new and it's different and . . . naturally it's going to change the way we're teaching, which is going to be for the better, I feel. . . . (Fourth-grade teacher).

(2) Parents and teachers believe the Vermont Assessment Program responds to the individuality of students, allowing students to demonstrate their growth in learning in visible and self-affirming ways. Most teachers are accommodating assignments to the needs of students, though they are still struggling with how to rate the portfolios for all students according to assessment guidelines while respecting students' individual differences.

In the writing, we have had to make adaptations. Some of these kids were not able to write, basically. I would give them a tape recorder, they would talk their stories into the tape recorder. I would write it down and say "Here's a rough copy; now you copy it over and make it look as good as you can for your final copy." Those kids did pretty well with that; they still liked telling their stories (Fourth-grade teacher).

I think if students work in the portfolio environment they have the opportunity to seek their own level of participation and excellence . . . it's a very sharing environment . . . we work in teams. Let's say a student might . . . be on an I.E.P. for written language . . . but his skill might be graphing on the computer. We have some students whose writing skills are not as focused, or not as yet up to what some of the other students can do in that group, so rather than feel alienated, they contributed. They graphed the solution to the problem, then the other students did the write-up (Eighth-grade teacher).

In math, if you've got somebody who's doing the measuring versus somebody who's recording the notes, that's great. I've got a kid who can use a ruler and then it works fine. He has a job and is an important part of the team. Somebody has to do that or the project doesn't work. I have a kid in there who is very good verbally. He

would love to stand up and report what they did, as long as he didn't have to write it. So, they [students with disabilities] function well in there, and for the most part, they are good, constructive members of a team (Fourth-grade teacher).

Teachers want more training in developing, accommodating, and evaluating portfolios. They also seek more time to work collaboratively with other teachers to increase their ability to integrate the active learning that this assessment system encourages throughout the curriculum.

(3) Parents and teachers want ways to work together more closely. Parents want to understand more about what their children are learning and how. They want to see demonstrations of student progress. They want to learn with their children.

I think one way I could learn [about my son's progress] is if I went in and observed him, maybe. I think in a way that would help me, too, because if I could actually see once in a while how they're teaching him, then it might spill over into how I could do it at home. I would kind of like to be asked to observe instead of asked to volunteer. To be a volunteer would be hard for me, but to be an observer would be good for me. When it comes to teaching my child, I feel like times have changed since I was in school, and I hate to teach him wrong. (Parent of a fourth-grader who has disabilities).

Teachers believe that parental support improves the learning of children. Yet, parents and teachers have problems communicating with each other. Some parents are afraid to go into the classroom and ask to see their child's portfolio. Others want to know more about the changes in curriculum and assessment and wonder how they can be involved. Still other parents do not seem to be involved at all in their children's learning, and teachers are not sure how to draw them into the process.

Future Directions

One way to determine the extent to which students with disabilities are included in the national reform movement is to analyze their inclusion rates in national and state data collection programs (The National Association of State Boards of Education, 1992, p. 22).

The National Center on Educational Outcomes has estimated that between 40 percent and 50 percent of the school age population of students with disabilities is **not** included in national and state assessment data collection programs (Thurlow, 1992). In the inclusive classrooms of the fourth and eighth grades in Vermont, children with disabilities **are** participating in the portfolio system of assessment in math and writing. They need to receive support and accommodations to participate, and those accommodations must be taken into account when their teacher evaluates their portfolios. General and special educators are still developing ways to communicate and work with each other to support all students. Often teachers do not feel ready to take the next step, communicating with parents about the changes in curriculum and instruction engendered by the change in assessment.

However, Vermont's education reform agenda can provide a vehicle for parents, teachers, and students to collaborate around learning. Parents are talking to teachers; general educators are talking to special educators; students are talking to teachers and parents. This is not to say that parents, teachers, and students should not be talking more.

Teachers have to communicate with the parents, and if the parents don't communicate with the schools, those are the ones you have to try a little harder to reach until you can get through in some way (Parent of a fourth grader who has disabilities).

The Next Step

At the end of the 1992–93 school year, the schools that are participating in the research project will look carefully at the themes and questions emerging from the data, and each school will develop its own plan to make changes in the way that teachers involve parents in their children's learning. During the 1993-94 school year, the research team will gather additional data to help determine the effectiveness of those changes, and to help assess whether the **Green Mountain Challenge** can benefit students with disabilities. ❦

References

Biggam, S.C. (1992, December). *The meaning and use of portfolios in statewide assessment.* Paper presented at the National Reading Conference, San Antonio, TX.

Kane, D. (1992, December). *What's Goin' On.* Montpelier, VT: Vermont Department of Education.

Mills, R. (1993, January). *Commissioner's report to Vermont State Board of Education.* Montpelier, VT: State Department of Education.

The National Association of State Boards of Education. (1992). *Winners all: A call for inclusive schools.* Alexandria, VA: Author.

U.S. Department of Education. (1992). *Fourteenth annual report to Congress on the implementation of the individuals with disabilities education act* (ED/OSERS Publication No. 92–6). Washington, D.C.: U.S. Government Printing Office.

Vermont Department of Education. (1990). *A Green Mountain challenge: Very high skills for every student, no exceptions, no excuses.* Montpelier, VT: author.

Vermont Department of Education. (1992). *Act 230 summary—December 1992.* Montpelier, VT: author.

Partnerships Between Therapists, Parents, and Children

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Photo courtesy USPHS

Introduction

Occupational and physical therapists provide essential services to infants and young children and their families and bring valuable perspectives to interdisciplinary early childhood teams (Dunn, Campbell, Oetter, Hall, & Berger, 1989; Effgen, 1988). Their contributions are particularly evident in situations in which early childhood development is disrupted by disabilities or vulnerabilities in gross motor, fine motor, sensory, play, and activities of daily living domains. Expansion of early intervention and early childhood programs, development of community based programs, and movement toward family centered services are providing therapists with challenges and opportunities to improve their services for children with special needs.

Pediatric practice has evolved dramatically in the past two decades. Significant changes have occurred in the numbers and proportions of therapists providing services, the development of frames of reference, applications of technology, and models of service delivery. Occupational and physical therapists provide services in educational settings, community based programs, and homes through early intervention and home care services.

There is a severe shortage of qualified occupational and physical therapy personnel to meet the needs of young children with disabilities and their families. Recent projections suggest that the shortages will reach crisis proportions in the next five to ten years (NCCIP, 1989). Unless additional therapists are recruited into early child-

hood programs, and the skills of current therapists enhanced or upgraded, young children and their families will not have access to necessary and beneficial therapeutic services.

Occupational and physical therapists who work with young children recognize the need to improve their abilities to respond to the needs of families. Many therapists who are currently practicing received their training at a time when the medical model of practice was emphasized and less was known about early childhood development and the influences of family life and environments on developmental outcomes. In general, practitioners report that they received limited training in methods to develop an understanding of family needs and implement family centered approaches to interventions (Hanft & Humphry, 1989).

Until recently, educational programs emphasized the role of the therapist as an expert and presented models for family involvement that conceptualized family members as potential extenders of therapy. Increasingly, occupational and physical therapists, like other early childhood disciplines, are reframing their approaches to facilitate the development of partnerships with families and other members of the service delivery team. Therapists, and representatives of other disciplines, have identified the need for interdisciplinary training initiatives that enable them to learn from other professionals and develop the interpersonal skills required for effective team functioning (McCollum & Thorpe, 1988; Edwards and Handley, 1992.)

Basic professional preparation also promoted the belief that the primary model of therapeutic intervention was direct, "hands-on," child centered services (Bazyk, 1989). Models of indirect service and consultation received limited attention. Over the past several years, leaders in both professions have advocated expanding the use of consultation and indirect services in early childhood programs. "Best practice" is viewed as individually designed packages of direct, indirect, and consultation services (Bundy, 1991). Recent studies of pediatric practice reveal that therapists report that they spend only approximately 10–15 percent of the work time in delivering both indirect and consultative services (Lawlor & Henderson, 1989; Bundy, A., Lawlor, M., Kielhofner, G., & Knecht, H. 1989, Hanft & Humphry, 1989).

At the University of Illinois at Chicago (UIC), we have been working with therapists, parents, and other professionals to develop strategies to promote family centered services and to address the needs of practitioners who wish to improve their effectiveness in early childhood practice. The purpose of this article is to describe these initiatives and share some insights that we have gained related to promoting partnerships between therapists, families, and other professionals.

Overview of the UIC Therapeutic Partnership Project

The University of Illinois at Chicago (UIC) Therapeutic Partnership Project is funded by the Office of Special Education Programs, U.S. Department of Education. The program design was based on our experiences with a Maternal and Child Health Training Project entitled "Advanced Competencies in Maternal and Child Health for Occupational Therapists." Through the graduate program, research, and continuing education activities of this project, we identified the need to provide leadership in the development of interdisciplinary models for family centered therapeutic interventions and a comprehensive in-service training program for community based occupational and physical therapists.

This three-year interdisciplinary in-service training project is designed to address the manpower shortages, promote models of therapeutic practice that are family centered, and provide a professional development program. We believe the solutions to the manpower shortages involve the following: (1) *recruiting* therapists into early childhood practice who have not been working or who are working in other practice areas; (2) *retraining* therapists who need additional training to meet the new demands in early childhood practice; and (3) *enhancing* the skills of advanced practitioners so they can provide specialized care to children with complex health care problems and their families.

The curriculum model integrates didactic and practicum experiences in four major domains: (1) family centered services, (2) maximizing developmental outcomes, (3) interdisciplinary collaboration, and (4) innovative models of service delivery.

The philosophy of the program is that "best practice" results when therapists: (1) form effective partnerships with young children, their families, and other providers; (2) recognize, respect, and integrate the perspectives of all members of the intervention team including families; (3) share the responsibility for service planning and implementation; (4) use their knowledge and apply their skills in a cost-effective manner that maximizes developmental outcomes; and (5) contribute to the effectiveness of partnerships by sharing their expertise and learning from other partners. It is our belief that genuine collaboration in determining the needs, goals, and methodologies of our interventions is most likely to result in favorable outcomes for children.

Through our studies of pediatric practice and the training needs of practitioners, we have identified a continuum of professional development needs. Therapists must engage in a process of lifelong learning to integrate new knowledge and adapt their intervention strategies to accommodate new demands and the needs of emerging populations (e.g., children with AIDS, very premature infants, and children exposed in-utero to toxic substances).

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We collaborate with practitioners in the development of Individualized Learning Plans (ILP) that identify their needs, capitalize on their strengths, and address learning objectives. The ILP process provides an opportunity to simulate the collaborative process necessary to develop effective Individualized Family Service Plans (IFSP).

Perspectives of Parents

Throughout the design and implementation phases of the project, we have collaborated with families, community clinicians, and members of related disciplines. The input that we have received from parents has been particularly valuable. Parents, who have a child with an illness or disability, have served as advisors and project faculty. During the first year of the project, we conducted focus group interviews with parents who expressed an interest and willingness to be interviewed about their experiences with therapists. Their comments were noted and reviewed for themes. Four main themes emerged, the first being **parents' expectations of therapists**. This theme had three sub-themes which were: knowledge of skills, personal attributes, and communication. The most frequently heard comments were regarding therapists' ability to problem solve. Several parents felt that it might not be reasonable to find a therapist that is knowledgeable about all conditions and problems, but it was necessary for a therapist to know how to access other resources and be able to network. The second theme was **parents' needs/issues**, which was a broad category that included some general issues parents face as parents and some more specific issues that relate to being the parent of a child with a disability. Some examples of parents' needs included: flexible therapy schedules; not having to change therapists; and that therapists be considerate of family

time. The third theme was **things that make a parent angry**. These comments were specific to insensitivity that people showed toward parents, families, and children with disabilities. The fourth theme was **advice and suggestions from parents.** These comments were a collection of statements that might help a therapist relate to a family, parent, or child. For example, therapy activities need to be fun, interesting, and age appropriate, and parents would like to hear something positive from a therapist about their child.

For the most part, parents were extremely positive about the value of therapy. We were struck with the minimal emphasis parents placed on specific treatment approaches and techniques that therapists themselves seem to value. Parents placed a greater value on the relationships they had with a therapist, communication, and the resources a therapist could bring to a family.

Lessons We Have Learned

Movement to more family centered models of service delivery requires a reframing of many of the traditional assumptions that support therapeutic practice. Many therapists are challenged by the need to make foundational shifts in their practice including a redefinition of the nature of the work of therapy, development of collaborative partnerships, forming new types of relationships with parents and other caregivers, and implementation of service delivery systems that are more responsive to the needs of families.

Although these changes are complex, we have been particularly impressed with the willingness of people to think in different ways. There is a climate of readiness for change. The impetus for change has developed both from organizational demand and the inherent commitment of therapists to adopt strategies that will maximize the effectiveness of their services. At this point in the project, we have collected valuable data that support our belief that many therapists have changed their attitudes and are beginning to introduce changes in their practices.

However, this change in attitude reflects only the beginning phase of the change process. Many therapists have reported to us that they are struggling to achieve structural changes within their practices. We recognize that changing practice takes more time, support, and resources. For many therapists, movement towards more family centered practice places both their professional identity and self-esteem at risk. For the therapists to successfully achieve foundational shifts in their practice, they need organizational supports and a facilitative climate. Through the UIC Therapeutic Partnership Project, we are moving towards training models that are institutionally based and that integrate all team members and representatives of the families who receive services.

Changes in the nature of the relationship with families pose particular challenges for therapists. Therapists who were trained in an expert model of practice often find the transition to collaboration and shared decision making difficult. Although collaborative approaches to therapy are not new, collaboration based on expert models often involved encouraging the parents to "buy-in" to the plans of the therapist. Shared decision making throughout all phases of the intervention process is a distinctly different process. Effective collaboration occurs when therapists and parents form relationships that enable the development of a shared understanding of the needs, expectations, hopes, and contributions of all partners. Progress in moving towards more collaborative models is hampered by our lack of understanding of the characteristics of optimal relationships between therapists and families. Through narrative interviewing with families and therapists, we are in the process of identifying the essential limits.

Perhaps the most important lesson of the project has been the recognition of the value of engaging parents and therapists in discussions about family centered therapeutic practice. Therapists want more opportunities to talk with parents and parents want more opportunities to talk with therapists. Both the parents and the therapists have reported that they have achieved better understandings of the perspectives of their partners. This understanding should facilitate the process of forming effective relationships.

References

Bazyk, S. (1989). Changes in attitudes and beliefs regarding parent participation and home programs: An update. *American Journal of Occupational Therapy, 43*(11), 723–728.

Bundy, A. (Ed.). (1991). *Making a difference: OT and PT in public schools*. Chicago, IL: The University of Illinois at Chicago.

Bundy, A., Lawlor, M., Kielhofner, G., & Knecht, H. (1989, April). *Educational and therapeutic perceptions of school system practice*. Paper presented at the American Occupational Therapy Association Annual Conference, Baltimore.

Dunn, W., Campbell, P.H., Oetter, P.L., Hall, S., & Berger, E. (1989). *Guidelines for occupational therapy service in early education and preschool settings*. Rockville, MD: American Occupational Therapy Association.

Effgen, S.K. (1988). Preparation of physical therapists and occupational therapists to work in early childhood special education settings. *Topics in Early Childhood Special Education, 7*(4), 10–19.

Hanft, B. & Humphry, R. (1989). Training occupational therapists in early intervention. *Infants and Young Children, 1*(4), 54–65.

Edwards, S. & Hanley, J. (1992). Survey of interdisciplinary activity between occupational therapists and speech and language pathologists in the public schools. *The Occupational Therapy Journal of Research, 12*(1), 35–49.

Lawlor, M. & Henderson, A. (1989). A descriptive study of the clinical practice patterns of occupational therapists working with infants and young children. *American Journal of Occupational Therapy, 43*(11), 755–764.

McCollum, J.A. & Thorpe, E.K. (1988). Training of infant specialists: A look to the future. *Infants and Young Children, 1*(2),55–65.

NCCIP. (1989). *The intent and spirit of P.L. 99–457: A source book*. Rockville, MD: NCCIP.

Inservice Programs for Related Services Teams Serving Medically Fragile Children

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A growing number of children with severe, chronic health impairments and medically fragile conditions are entering school today. Children who depend on gastrostomy feedings, require respirators, have seizures, suffer from chronic illnesses, or who have other serious health conditions are seeking a public education along with their peers. Lacking qualified personnel trained to serve these medically fragile children, school districts have had difficulty ensuring their safety and providing an appropriate education in the least restrictive setting. (Conner, 1987)

This need for trained personnel has been the impetus for a three-year collaborative effort at Oregon Health Sciences University and the University of Washington. The Medically Fragile Inservice for Related Services Teams project (M-

Photo by Black Star

FIRST) is now in its third year of developing a training model in six pilot districts. The project is funded by the Office of Special Education and Rehabilitative Services of the U.S. Department of Education and co-sponsored by the Oregon and Washington state education agencies.

For families with medically fragile children just registering for class can be traumatic. "It was scary at first to put our daughter in school," said Marsha Murchy, the mother of a nine-year-old born with severe cerebral palsy who lives in a suburban Washington State school district. "They had a lot of problems trying to find an appropriate program for her because she had so many more needs than the other children. There were a lot of unknowns."

It can also be very stressful for school personnel. "Often, the classroom teachers have never had to deal with this type of problem before, neither have the special education staff nor the building administrator," said B. J. Jorgensen, special education director for a rural Washington district. "So there's fear on all sides. The schools wonder, 'Do we have the capability or even the authority to do what the parents are asking?'"

Today, schools are expected to safely educate medically fragile children who, a few years ago, would have remained at home, in hospitals (Rosenfeld, 1989), or in other health care settings (Brodsky & Wilson, 1989). Improved care is increasing the lifespan of children with severe health impairments, and the number of these children has doubled in the last 20 years. An estimated 2 percent of children under 18—about 1 million nationally—have a chronic illness that interferes with daily activities (Newacheck and Taylor, 1992).

A variety of training materials are being developed to assist school districts in their efforts to provide safe and supportive education environments. However, until the M-FIRST project, there have been no models for developing and training teams of skilled personnel to meet the complex needs of a medically fragile child in the school setting.

In addition to development of a model in-service training program for related services personnel, educators, and administrators, the major goals of the project include:

- implementation of model programs in selected sites in Oregon and Washington;
- evaluation of the effectiveness of the training model;
- development of materials that enable others to replicate all or parts of the training model; and
- national dissemination of the materials.

M-FIRST also seeks to integrate medical and educational resources to enhance the available services.

Who is "Medically Fragile?"

Early in the project, it was determined that neither state had a well defined method for identifying medically fragile children or the services delivered in the school setting. M-FIRST was able to develop and implement such a process. The project started by adopting a working definition of "medically fragile" that included language contributed by both states.

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Under this definition, children identified as medically fragile fall within one of three categories: (1) those whose chronic health related dependence requires 24-hour skilled supervision; (2) those whose dependence does not require 24-hour supervision but whose life-threatening incidents are unpredictable; or (3) those whose dependence is predictable but require regular monitoring by skilled health care providers (Billings, 1989).

As the project proceeded, participants were encouraged to modify the definition to fit their local needs. In general, the definition had a significant impact.

"We were surprised at the numbers out there once we used the definition suggested by M-FIRST," said one training participant, an occupational therapist with an urban Oregon school district. "It doesn't just mean the child who needs a breathing apparatus to live. It's more encompassing. For example, it might be a child with feeding difficulties who could easily inhale food, or a severe diabetic who isn't under control."

Selection of Pilot Districts

Six representative sites were selected for the development and implementation of the training model. The school districts in each community agreed to collaborate with the project and provide personnel to take part in activities. School districts also selected representatives to serve on the project advisory committee.

Three Washington communities and three Oregon communities were chosen. Criteria included population size and geographic characteristics. The selection yielded a cross-section of large, mid-size, and small communities in urban, suburban, and rural settings. Other considerations included the perceived training needs of the districts.

A goal of the site selection was to build flexibility into the model. The diversity of the sites proved to be effective in reflecting a variety of community needs. For example, in urban and suburban areas with multiple resources, a primary concern was communication.

"When we surveyed our area, we found that one of the problems was having enough information to accurately provide good emergency care plans," said one training participant. "That meant having good information sharing between the medical community and the educational community. In a larger area like ours where there are many different agencies, it's harder to know who's serving whom, and who's coordinating it all."

Rural areas faced different problems. "Within our seven counties, I'm the only person who would be able to consult with schools on the health care aspects of a child with medical needs," said a state regional nurse from a rural Oregon district participating in the project. "There are no technical medical specialists except in the larger centers. The hospitals have some outside services, but because of the distances involved, they don't reach these children on an ongoing basis."

Diversity was also evident in the population of medically fragile children. There proved to be a wide distribution in their ages and their levels of fragility. Taken together, the districts served a varied group of children whose requirements ranged from continuous monitoring of life-sustaining devices to periodic supervision of status, comfort, and health.

Team Selection

M-FIRST staff recruited teams in each community with the assistance of special services directors in the participating districts. Addressing local needs was a high priority in selecting team members.

Just as the districts varied considerably, so did the nature and functioning of the teams. In some cases, multidisciplinary teams of service providers were already in place and sought further training. In other locations, there were no existing teams and, as a result, new teams of service providers were developed for project participation.

In rural districts, M-FIRST teams tended to include not only school personnel but also members of public and private agencies and other individuals, because that is how services are normally delivered in those areas. By contrast, team members in one suburban community were almost all housed in the same school district building. In another of the larger communities, individuals were actively providing services but were scattered throughout the district, and M-FIRST was able to help them address their goal of functioning together as a team.

While team sizes varied from four persons to seven, care was taken to ensure a multidisciplinary profile on each. Membership on the various teams included parents of medically fragile children, physical therapists, occupational therapists, speech pathologists, school psychologists, teachers, paraprofessionals, school administrators, school nurses, and Head Start personnel.

Assessment of Training Needs

To determine training requirements, a comprehensive list of competencies was drawn up by M-FIRST staff and a broad group of representatives in the field. State education agency personnel, nurses, physicians, parents, educators, and school administrators all helped form the competency listing used by the project.

The list was grouped into eleven major competency areas (Figure 1). The list included nearly 100 different sub-competencies specific to meeting the needs of young medically fragile children. For purposes of analysis, these eleven categories were then grouped into three mega-competencies: Technical Skills, Team Process, and Service Delivery.

Team members were then asked to rate "Where I am" and "Where I want to be" on each of the competency items. The resulting data indicated to project staff which topics were seen as

M-FIRST Training Competencies

1.0	Management of medical conditions in school settings
2.0	Grief and loss
3.0	Managing transitions
4.0	Working with families
5.0	Interdisciplinary team processes
6.0	Functional approaches to providing educational services
7.0	Safety measures
8.0	Legal issues
9.0	Clinical issues
10.0	Team leadership
11.0	Team support

greatly needed in the field. Suggestions from the advisory committee and the staff's research into best practices were combined with these data to develop the training content.

The Training Program

Content of the training was organized around the three mega-competencies. The technical skills category included such clinical procedures as tracheostomy care, clean intermittent catheterization, respiratory therapy, and related activities. It also included management of medical conditions in the classroom and home settings, and functional approaches to providing education for medically fragile children.

Team process training covered interdisciplinary team functioning, team support, leadership, case management, and issues surrounding grief and loss. Service delivery topics included safety measures, legal and ethical implications, and the management of transitions between home or health care facility settings and the school setting.

A variety of formats were used to address the varied levels of training and diverse disciplines of the participants:

Summer Institutes—Team members from all six sites came to a central location each summer for four full days of intensive training. Both discipline-specific and general topics were covered. There was a mix of hands-on training, lectures, panel discussions, and case presentations. Many of the participants felt that, in addition to the training, the opportunity to share knowledge with others in the field was a valuable part of the institutes.

Conference Presentations—One-day conferences were also presented during the school year, either at a central location or out in the pilot districts. Usually held in the spring and fall, these sessions focused on issues of state or district importance but also included some discipline-specific subjects.

As team members began to receive training and utilize it in everyday settings, they were able to identify topics of special interest on an individual or team basis. These topics were then included in the conferences or addressed as part of the follow-up program.

"I was very interested in CPR for the medically fragile population," said one participant. "If a child suddenly has a seizure in the wheelchair, can CPR be done in the chair? Or do you need to take the child out of the chair? Where do you place the child? Also, if there is a feeding tube, how does that change the way the technique is applied?"

Follow-up Goals—Each team developed follow-up goals and plans to be completed during the school year. In addition, team members developed individual goals to be completed in their home school district. For example, one team set up intake protocols for their district, with school personnel on the team doing the initial development. Another district decided to assign a school nurse to spend half her time working with medically fragile issues, ready to respond to any school as the need arose. Project staff assisted participants in their follow-up efforts with further training, resources, and materials. The follow-up planning allowed teams and their members to personalize the concepts introduced in training sessions.

"One of the things I'm doing this year is compiling a list of grief and loss resources for the district," said one of the parents participating as a team member. "When a child passes away, it can affect anyone who knows the child, from siblings to classmates to teachers and aides. This has become especially important to me because of my daughter's deteriorating health. The doctors have said we're probably not looking at a whole lot of time left with her."

Technical Assistance—While some training needs came up during the goal-setting process, others came up later in the course of the project as individuals or teams encountered new challenges in the field. M-FIRST responded with technical assistance as required.

"In my area, I found I was dealing with some children who had nutritional needs," said the nurse participant. "As an R.N. and not a dietitian, I needed more education in that. Kids with oral motor problems have difficulty eating, and you need to meet the caloric needs that will give them staying power to attend school. M-FIRST secured a nutritionist who helped me on that. She spoke to our whole team on nutrition, and then I was able to benefit further by having a one-on-one with her."

Project Impact

Team members were asked to rate "Where I am" and "Where I want to be" relative to the M-FIRST competencies again in the second year of the project. Preliminary results of data analysis point strongly to the positive impact M-FIRST has had on the self-rated competency of participants

Summary of Results of M-FIRST Needs Assessment by Mega-Competencies for Project Teams

Competency	N	AM1	AM2	P-value
Technical Skills	22	2.90	3.36	**.0012
Team Process	22	2.84	3.49	**.0002
Service Delivery	22	2.58	3.23	**<.0001

Key: (using a 5-point Lickert Scale)
AM1 = Participant's rating "Where I am now"—first administration
AM2 = Participant's rating "Where I am now"—second administration
**Statistical significance: p-value <.05

across all three of the mega-competencies (Figure 2).

The "train-the-trainer" aspect of the model has been validated through documented outreach contacts with team members in the extended community. Many teams offered inservices to their own and other school districts, and then to even larger audiences, as an outgrowth of their follow-up plans. Project staff supported M-FIRST teams in these efforts.

"We decided that one of the best ways to get more information out there was to put on some sort of statewide seminar," one participant said. "We sent in an idea to the Oregon Conference, an annual meeting on education issues, and got onto the agenda."

The M-FIRST project has also demonstrated its effectiveness in improving team process. A team functioning assessment instrument was administered annually throughout the project, and significant positive change was measured.

Consumer satisfaction data are consistently high for each of the training events. In addition, team members consistently expressed high regard for the overall value of the project.

"I no longer feel like an outsider," said one parent. "It's much more of a team, and there's much more information available. It's comforting to know there are people at the school who actually can take care of complex health needs. And parents also need to know what they can and cannot expect from the school. There are certain things that are parental responsibilities and certain things that are the school's."

School administrators also see the positive impact. Said Jorgenson, "The training has been a tremendous help to the team members, and we've been able to pass it on to school staff. It's also helped us understand what the child is going through, and what the family is going through."

Into the Future

The project has met its goals of developing an in-service training model, implementing pilot training programs, and evaluating their effectiveness. The M-FIRST teams have also succeeded in identifying the medically fragile children in their areas and documenting the services received. While follow-up training and assistance to the M-FIRST teams will continue, the final year of the project is now focusing on the development and dissemination of training and replication materials.

Project staff plan to draft materials covering various issues related to the care and education of medically fragile young children. Currently, it is anticipated that topics will include: (a) team building and interdisciplinary functioning; (b) technical issues such as infection control, seizure management in the classroom, nutrition, and similar issues; (c) a resource bibliography including print, video, and computer-based resources; and (d) legal and ethical issues including resuscitation, feeding, liability, and other related topics.

Looking at the published data and the status of training in Oregon and Washington three years ago, project staff had an idea for fulfilling a unique training need. They were able to try the idea, while remaining flexible and responding to feedback provided by the people who were trained.

The result is a model that can be applied successfully in any school district in the country, regardless of the existing resources, geographical considerations, or medically fragile population to be served. M-FIRST staff believe well-trained interdisciplinary teams are the key to serving the needs of medically fragile children effectively.

As one of the parents participating in the M-FIRST project stated, "If it weren't for this kind of team, my child probably couldn't be in school today."

References

Billings, J.A. (1991). *Medically fragile technical assistance manual*. Olympia, WA: Superintendent of Public Instruction.

Brodsky, M. & Wilson, D. (1989). *On the agenda: Oregon's chronically Ill children and their families*. Report of the Steering Committee. Salem, OR: Oregon Department of Education.

Conner, F. (1987). A Response. In F.P. Conner (Ed.), *Critical issues for low incidence populations*. (pp. 16–25). Reston, VA: Council for Exceptional Children.

Newacheck, P.W. & Taylor, W.R. (1992). Childhood chronic illness: prevalences, severity, and impact. *American Journal of Public Health, 83*.(3).

Rosenfeld, S.J. (1989, October). *Introduction*. Paper presented to the conference, Serving Medically Fragile and Technology-Dependent Children in the 1990s, Fort Lauderdale, FL.

From Vision To Reality: *The Opened Door*

Jamie starts her work day at 10:00 am and ends her day at 5:00 pm. Family pictures, stuffed animals surround her work station. She assembles her equipment, turns on her computer, enters commands, and her screen appears, signalling the completion of her preparation for work. Mark Reeder, the mailing coordinator, stops by her office with the day's assignments that include updating mailing labels and entering figures on accounts-payable forms. These assignments have been fastened into a notebook. The assignments are placed on a music stand clamped to a table. Jamie picks up her pencil with her teeth and begins to input data on a specially designed keyboard called a mini-keyboard, which is attached to her IBM computer. This keyboard rests on a universal mount so that she has ease in access to the keyboard and to the computer monitor.

Jamie is a young talented woman who graduated from Everett High School in Lansing, Michigan, and who now works for an international school catalogue company called Michigan Products, Inc. She has a 98 percent accuracy rate and is valued by her employer. She is also a person with cerebral palsy who uses an electric wheelchair and is unable to use her hands to strike a traditional keyboard. Pat McSherry, Vice President for Marketing at Michigan Products, Inc., was the key person in Jamie's successful transition from school to job placement.

Ruby Frazier
Director
Beekman Center

The vision of many persons with disabilities is to become gainfully employed. In past years, if a person with Jamie's level of disability applied for a job, he or she would be faced with questions about their ability to deal with the realities of being mainstreamed with the general population of employed persons. Today, however, with the advancements in assistive technology, there are fewer physical barriers to employment though there still exist many attitudinal, emotional, and economic barriers. The high unemployment rate of people with disabilities in our society suggests that training programs and service providers have not fully addressed this problem.

The Challenge

Persons with disabilities face a challenge in a world where movement, strength, speed, and stamina are traditionally thought to be required to function effectively in the workplace. Physical limitations of the prospective worker require that the employer make facility adaptations because the limitations may include impaired mobility, problems in control of gross and fine motor movements, lack of stamina, diminished strength, unintelligible speech, hearing loss, or blindness. This population includes students with birth defects, traumatic injuries, health impairments, and neuromuscular disorders.

To place an individual with any one of these disability concerns into employment requires skill, time, and team work. The challenge is to place persons with severe disabilities into competitive employment where speed, strength, and stamina must translate into dollars, cents, and profit (Frazier, 1987).

In 1984, the federal government allocated over $1 million to increase the number of persons with disabilities in the labor force through partnerships with business and rehabilitation services as directed through the Rehabilitation Act of 1973, as amended. Also of interest was the expansion of cooperative programs with business and with schools to achieve positive employment outcomes for these youth. (Annual report of the Rehabilitation Services Administration, 1984).

More than 250,000 students with disabilities leave public supported educational programs each year (Will, 1984). Many leave, hoping for employment and are often frustrated by their inability to find a job. The U.S. Commission on Civil Rights (1983) reported that unemployment rates among individuals with disabilities are much higher than for able bodied individuals, and that approximately 50 to 75 percent of adult persons with disabilities are unemployed (Hasazi, 1984). Most studies in a search of the literature describe placement programs for students with disabilities, but these studies deal with those who are mildly to moderately involved. Students with

severe disabilities are excluded from most population samples. Hasazi (1985), in her study of the employment status of students who are physically challenged, found that 55 percent of her sample had jobs, a significant number held seasonal, part-time, or intermittent jobs (17 percent); that her population had a low usage (11.4 percent) of Vocational Rehabilitation Services and higher use of the Vermont Job Service (34.7 percent) financed with Job Training Partnership Act (JTPA) funds. Her study covered a population of students who are mildly to moderately disabled and those with more severe disabilities were absent from her sample. An interesting result of her study was that the student's last program in school was significantly related to current employment status, i.e., of those in resource rooms (considered more mildly disabled), 62 percent were employed compared with 36 percent of those in special classroom programs and considered more severely disabled.

Hasazi also found a significant association between current employment status and vocational education. For those students who had vocational education, 61 percent were currently employed compared with only 45 percent of those who had no vocational education. There was a relationship between summer jobs, school year part-time jobs, and work experience programs with current employment status. Of those students who had no summer jobs, only 37 percent were employed versus employment rates of 46 percent for those who had subsidized summer jobs. Of students who held part-time outside jobs during high school, 70 percent were currently employed versus 41 percent of those not holding such jobs. Most of the sample worked below the minimum wages with the highest percentage of former students employed in service occupations.

Frazier (1987), in her study of students, employed after graduation from the Lansing School System, Lansing, Michigan who were physically disabled, found that less than 50 percent (46.8 percent) of the population responding to the survey (N = 111) were employed and when considering degree of limitations (mild, moderate, severe), that 83 percent of those persons designated severely disabled were unemployed.

Contrary to the Hasazi study, the respondents to the 1987 Frazier study showed little difference in whether or not a student had vocational training prior to job placement: 52.2 percent of the respondents who had vocational training were employed and 50 percent of the respondents who had no vocational training were also employed.

The Vision

According to the Lansing School System Study only 17 percent of the students who were severely limited were employed. This population is most at risk for unemployment because of the equipment, staff, and facility adaptation required in turning a vision into reality. Three years ago Jamie would not have been employed. Her talents and abilities were already in place, but the cost in providing her with the tools and support staff necessary for her to realize her potential was not affordable within the existing school system budget. Special educators recognized that, though special education was successful in transitional job placements for the more able bodied students, a population of the severely physically involved (which includes the blind and hearing impaired) were not employed and were not being placed into jobs during or after graduation from high school.

In 1990 two parents, who both have children with disabilities, joined forces with special education administrators to author a grant to the U.S. Department of Education's Rehabilitation Services Administration called Projects With Industry. This grant was a part of the Rehabilitation Act of 1973, as amended, and provided for the type of funding needed to help support the placement of Jamie and other persons with severe disabilities into the work force.

Photo courtesy Beekman Center

Physical limitations are classified as mild, moderate, or severe in degree. "Mild limitations" means that the client moves about freely without appliances but may have one limb involvement. Medical attention is minimal. There are generally no communication barriers.

"Moderate limitations" means that the client experiences some difficulty in mobility and handling materials, may use appliances such as wheelchair, crutches and braces, and may have a communication problem but is able to function independently, with some modifications to the environment.

"Severe limitations" means that the client has time consuming difficulty with mobility and handling materials, or may not be able to move or handle materials without assistance from another person. This individual cannot perform tasks in his/her daily routine independently. He or she will need adaptations to the environment which may be in the form of electronic equipment, and this individual may have severe speech and language problems which require special equipment for communication (Frazier, 1987).

The Reality

Projects With Industry (PWI), within the Lansing School System, began, October 1, 1991. Its purpose is found in Section 611 of the Rehabilitation Act 1992, as amended:

> *. . . to create and expand job and career opportunities for individuals with disabilities in the competitive labor market by engaging the talent and leadership of private industry as partners in the rehabilitation process, to identify competitive job and career opportunities and the skills needed to perform such jobs, to create practical job and career readiness and training programs, and to provide job placements and career advancement . . .*

The awarding of this grant allowed the school system to devote full time to the development of partnerships within the community by a staff that consists of a director, a job coordinator specialist, job coaches, and a secretary.

Another important partnership, working daily with PWI, is Michigan Rehabilitation Services (MRS). MRS not only certifies each potential client seen by the PWI program, but also provides additional funding for equipment, such as computers, and services, such as rehabilitation engineering.

The project serves a population whose needs are high in the use of assistive technology. Some of the types of equipment used in the work place are:

- IBM Computers and Printers
- Mini-keyboards
- Expanded Keyboards (Intellikeys)
- Universal Mounting Systems
- WordPerfect Software (5.0)/Microsoft Works
- Lap Top Computers
- Speech Synthesizers (Deck Talk; Accent by Aicom)
- Communication Devices
- Platform (to allow access to equipment)
- Braille 'N Speak
- Tables (adjustable)

1991–92 was a successful year for the project. During this first year, 14 persons with disabilities were placed into competitive employment. Jamie was one of those persons. This program works because of the careful assessment of the students prior to job placement, the care taken in making a compatible job match, and the support given to the student and to the employer in the orientation phase of employment.

Services Rendered with Percentages of Resources

Type of Service	Percentage of Resources Commited
Job Development	10%
Job Placement and Follow-up Services	40%
Technical Assistance to Employers	10%
Provision of Assistive Technology	35%
Inservice at Work Site on Disability Awareness	5%

Types of Persons Served This First Year

Disability Category	Number Served	Percent
Hearing Impaired	4	21%
Ataxia Telangiectasia	1	5.2%
Muscular Dystrophy	1	5.2%
Cerebral Palsy	9	47%
Neurofibromatosis	1	5.2%
Arthrogryposis	1	5.2%
Spina Bifida	1	5.2%
Leukemia	1	5.2%

This is a transitional program from high school to the work force and most of those employed work part time (20-30 hours per week). Of the 14 persons placed into competitive employment, 12 of the 14 had not worked before. The average hourly wage was $5.00. PWI provided four persons with jobs who traditionally were considered unemployable because of the severity of their disability. The earnings of persons served by the project increased by an average of at least $75.00 a week over earnings at project entry.

Conclusion

Jamie's vision was to work and live a life that most people enjoy. That dream has been realized. Jamie started at MPI working for four hours a day updating mailing labels. She now works six hours a day. Her job has been expanded and she performs an essential function for the business. Jamie has plans to find an apartment and to live independently. There is a quiet revolution taking place in the world of work. Businesses are opening their doors to an untapped population of workers—a population that will begin to know what it means to accomplish, to grow, and to work for a living. It is a partnership between business, education, and rehabilitation. It requires funds, skill, creativity, time, and teamwork. It considers the interests and abilities of persons with disabilities . . . and it works!

References

Annual Report of the Rehabilitation Services Administration (1984) or Federal Activities Related to the Administration Rehabilitation Act of 1973, as amended (1992).

Frazier, Ruby (1987). *Vocational study of physically or otherwise health impaired post graduate students who attended Lansing School District program between 1940–1986.* MI: Western Michigan University.

Hasazi, S.B., Gordon, L.R., & Roe, C.A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*(6), 455–469.

U.S. Commission on Civil Rights. (1983). *Accommodating the spectrum of individual abilities.* Washington, D.C.: U.S. Commission on Civil Rights.

Will, M. (1984). *Bridges from school to work life. Programs for the handicapped.* Washington, D.C.: The Office of Special Education and Rehabilitation Services.

Effective Consumer-Service Provider Interactions in Vocational Rehabilitation

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Photo courtesy Thomas Czerlinsky

Introduction

Empowered consumerism has gained increasing emphasis as it becomes ever more important for consumers to be active partners and participants in the rehabilitation process (Chandler & Czerlinsky, 1992; Czerlinsky & Chandler, 1990). As pointed out by Czerlinsky, Chandler, and Moore (1991):

> *Largely as a result of increasing political activism by consumers, significant others, and advocates, rehabilitation is no longer a process that is "done to" consumers. Such groups are increasingly demanding that they and their significant others be active partners in the rehabilitation process, as well as active decision makers in activities that intricately affect them. This activism can be seen in the growth of consumer-run groups that focus on employment, support, housing, social interactions, and other needed benefits* (p. 2).

Figures from the 1990 U.S. Census show that 9 percent of the population has disabilities, and that these individuals are nine times more likely to have difficulty finding work. One in every 25 Americans has a need for some type of assistance to achieve employment. Labor market participation figures show that only 12.3 percent of individuals with severe disabilities are employed. Additionally, only 65 percent of those individuals who have less severe disabilities are employed, as compared to an 80 percent employment rate for individuals without disabilities. Two and one half times more individuals with disabilities are at the poverty level than any other group, with men and women with disabilities making $2,600 to $3,600 less, respectively, than their peers without disabilities (Condeluci, 1991). In addition, Frank & Kamlett (1985) have estimated that the direct costs and expenditures in the United States for mental health care *alone* in the 1980s was between $19.2 billion and $22 billion per year.

In rehabilitation, rather than focusing on individual pathology, there is a push for the individual to function in different roles within the community and to participate in full community life as spouse, parent, friend, neighbor, and wage earner (Hume & Marshall, 1980). Professionals subscribing to the principle of normalization

> *. . . held firm to the belief that persons with disabilities should live where they have the best opportunity to lead normal lives. They further proposed that community settings, rather than segregated institutions, would provide the least restrictive environment for most people* (Prieve & DePoint 1987, p. 4).

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Movement to community settings and frustration over inadequate services has led to a concurrent "self-determination" movement in which consumers are forming coalitions for advocacy and self-help. Consumers are beginning to participate in the selection and operation of their own service systems and the planning and design of rehabilitation programs. Nosek (1992) pointed out that:

> *People who have been rejected by the service system, judged "unfeasible" by vocational rehabilitation professionals...and excluded from participation in society by an inaccessible environment, rose up in protest and demanded the right to determine their own lifestyle. The fundamental tenet...is that consumers are the best judges of what they need and, therefore, have the right to determine their future* (p. 39).

This has led to a network of consumer groups at the local, state, and national levels (Chamberlain & Rogers, 1990; Chamberlain, Rogers & Sneed, 1989). "Consumerism" demands that the power to make eligibility and closure determinations "shift from the counselor and the system to the individual" (Nosek, 1992, p. 39). It is through the involvement and cooperation of consumers, their representatives, and service providers that significant efforts are being made to change the service provision for individuals with disabilities (Campbell, 1991).

Recent legislation, such as the 1992 Amendments to the Rehabilitation Act and the Americans with Disabilities Act (ADA), supports this movement and helps to ensure and protect the rights of individuals with disabilities. As so succinctly stated by Emener (1991):

> *The true value of rehabilitation services, even in the area of accountability, is not vested in the number of closures but in the impact on the quality of life and on the happiness of life of each individual client served* (p. 11).

The 1990s is the decade of empowerment for persons with disabilities (Carney, 1991; Nichols, 1990; Schmidt, 1991). Consumer goals and preferences and an individualized and flexible rehabilitation plan with a strong emphasis on work, housing, and social activities in the community have become "key ingredients for successful reintegration" (Carling, 1990).

While this philosophy has gained acceptance, even among reluctant rehabilitation service providers, very little attention has been paid to training the rehabilitation practitioner about the need for empowered rehabilitation partnerships, and how such partnerships can most effectively be established and maintained. While some experts have focused on the critical elements for creating an empowered rehabilitation partnership, empirically there is a lack of data. This study is one of the first empirically-based national investigations addressing empowerment as part of the rehabilitation process.

Methods and Results

Surveys and Participants: This study utilized a national sample in a three-stage modified nominal group approach. The participants included more than 300 service providers, political activists for individuals who have disabilities, rehabilitation policy makers, rehabilitation consumers, rehabilitation educators, administrators, significant others, and consumer activists.

The first survey asked respondents to identify, in a completely unstructured format, those elements that they considered to be critical for creating an empowered partnership. They were asked to respond regardless of the general acceptance of the element so that not only the general elements but also unique aspects for creating partnerships would be identified. All of the elements that were elicited on the survey in the first round of the study were treated as being of equal importance.

The second survey was designed to classify and rank, in terms of importance to the rehabilitation partnership, the original set of elements obtained in the first survey. The second survey also identified those empowerment elements that might be specific to particular individuals with certain types of disabilities.

The third and last survey required all participants in the study to identify a methodology or behavioral technique that would indicate the presence or absence of each individual empowerment element within an ongoing rehabilitation relationship.

The selection of participants for the project was initiated by conducting a random selection of individuals from the mailing lists of all major organizations dealing with rehabilitation. These lists included organizations focusing specifically on consumers of rehabilitation services, advocates, significant others, service providers, educators, administrators, and individuals involved in the political arena. All of the selected participants were mailed a packet that included the first open-ended survey. From this mailing approximately 300 responses were received. These open-ended responses were then subjected to Q-sort procedures. Q-sort procedures provide a method for taking unstructured data and identifying classifications and categories to bring order to the data. As a result of these procedures, six specific *categories* of empowerment elements were identified. These were: (1) Consumer Issues and Responsibilities; (2) Service Provider Characteristics; (3) Service Provider Roles; (4) Service Provision Techniques; (5) Qualitative Elements; and (6) Other Issues.

"Other Issues" is a category containing elements that could not specifically be classified under the first five categories but were considered important by the raters. There was extremely wide variation in the frequency of endorsement of each element as well as in the number of elements that ultimately fell under each category. The defined categories, and the elements that fell under each category, were utilized to construct the second survey. In total, under the six

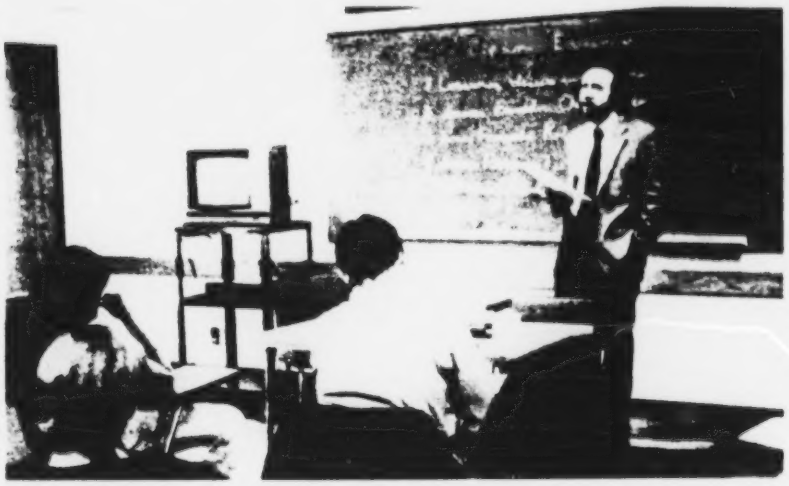

Photo courtesy Thomas Cardamas

categories, 733 different and unique partnership building elements were identified by the respondents as being "critical to creating an empowerment relationship." The instructions to the participants were to consider each element in terms of importance to consumer empowerment, and then to rate each element on a 7-point Likert scale in terms of how important that element is to empowerment, with 0 being "Not At All Important" and 6 being "Extremely Critical." In the third survey, the instructions to the respondents were to consider each element and indicate how they could tell if that element was present or absent in terms of behavioral, quantifiable, or measurable characteristics. The authors are currently using these behavioral indicators to determine what empirical impact the inclusion of empowerment elements might have on consumers and rehabilitation professionals.

Results

(1) Consumer Issues and Responsibilities:

This category included a number of subcategories and elements that were rated as critical and statistically significant. Among these were:

- Consumer is responsible for actions and consequences:
  Accepting ownership of problems.
  Having a role in one's own rehabilitation process.
- Consumer is responsible for goals:
  Participating in one's own plan.
- Consumer is responsible for decision making:
  Being actively involved in the process.
  Having the service provider actively encourage decision making.
  Having input into one's own future.

Indications: The critical elements found for "Issues and Responsibilities" of consumers were very consistent. Overall, for a truly empowered partnership to be built and sustained, the environment within which the rehabilitation relationship occurs should be one which conveys to the consumer that he or she must be an active decision maker and partner within the process. In addition, it is the responsibility of the service provider to encourage the consumer to accept full responsibility for his or her own life. The implications are that the traditional service delivery model would be inappropriate for creating an environment that fosters an empowered relationship.

(2) Service Provider Characteristics:

The first category focused on elements that consumers must provide. The second category focused on service provider issues and characteristics. Under this category, subcategories were identified, with elements under each. The subcategories and elements found to be most critical were:

- Service provider knows and admits his or her limitations to the consumer:
  Realization that the service provide does not have all the answers.
  Awareness of personal and professional limitations.
  Willingness to be wrong and admit it.
  Willingness to confront in a nonjudgmental manner.
- Service provider has unconditional regard for the consumer:
  Accepts the consumer as a person.
- Service Provider is motivated:
  Listens to the consumer.
  Attends sessions regularly.
  Communicates an interest in the consumer.
- Service provider education and training issues:
  Upgrades level of knowledge regularly.

Indications: Those elements found to be statistically significant for "Service Provider Characteristics" fell into a number of distinct domains. First, service providers must be cognizant of their own limitations. This serves as a good role model for consumers in that they must learn that mistakes are common to all individuals. Related to this interpretation, service providers need to continuously upgrade and improve their professional skills and knowledge. Service providers must be motivated listeners who encourage consumers to be actively involved in their *own* rehabilitation process. Interestingly, the element "Regularly attending sessions" was rated as highly significant. Consumers are saying that they demand the same respect, in terms of attendance, that service providers expect of consumers. Clearly, these patterns show the mutual, two-way process that is required for an empowered rehabilitation partnership.

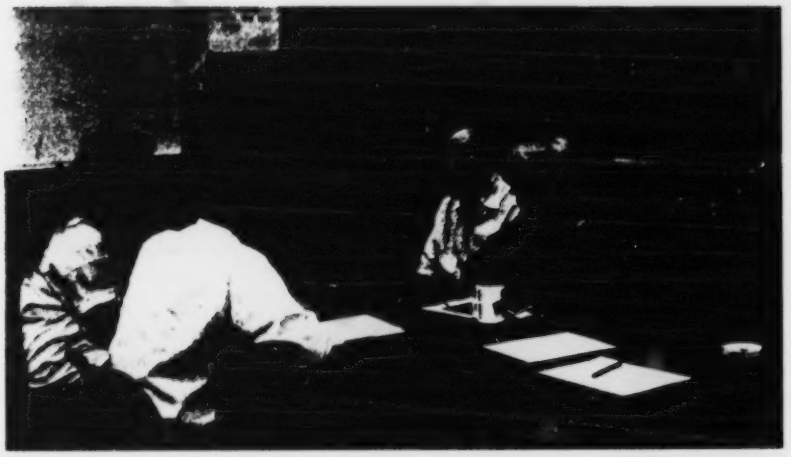

Photo by Thomas Cerbinski

(3) Service Provider Roles:

In this category, the subcategories included self-disclosure, goal orientation, cultural and ethnic issues, encouraging the freedom of the consumer, and the service provider as educator. Across these subcategories, a number of elements were identified including:

- Avoid labeling the consumer.
- Recognize one's own biases.
- Allow the consumer to engage in self-exploration.

Indications: These major elements suggested that the critical roles service providers need to take in terms of an empowered partnership revolve around issues of consumer individuality. Service providers must accept consumers as individual, unique beings, and encourage this individuality within the rehabilitation process. Labeling and classification systems and practices, so common in traditional service delivery models, have no place in an empowered rehabilitation partnership.

(4) Service Provision Techniques:

This category focused on specific techniques in the rehabilitation process. This was the most comprehensive category and included a large number of subcategories and elements.

- Treat the consumer as an adult:
  Service provider addresses the consumer as an adult.
- Communication skills:
  Service provider communicates at a level appropriate for the consumer, speaking directly to the consumer. Service provider listens and encourages consumer involvement in the process. Service provider is an active, *empathic* listener.
- Emphasis placed on consumer's strengths:
  Help consumer to identify his or her strengths.
- Service provider respects consumer's values and beliefs:
  Belief in and respect for rights of the consumers.
- Rehabilitation/treatment as a partnership/team effort: Encourage consumer involvement.
  Is open to consumer's questions.

Indications: Two major themes emerged from this collection of empowerment elements. To create an empowered partnership, consumers must be treated as adults, whose beliefs and values are respected. The communication skills of the service providers must be attuned to the consumers. To foster and sustain independent decision-making activities by the consumer, the communication level must be appropriate and direct. Consumer input must be actively and emphatically sought for the direct communication process to be nurtured.

(5) Qualitative Elements:

Under this category, many traditional service provision elements were judged important, but there were also several unique empowerment elements.

- Respect:
  Service provider shows genuine respect to the consumer.
- Honesty and genuineness:
  Rehabilitation relationship is based on honesty from both sides.
  Service provider keeps commitments and promises.
  Service provider answers questions as accurately as possible.

Indications: The main themes under "Qualitative Elements" focused around the issues of respect, honesty, and genuineness. While these themes are certainly not new to a rehabilitation relationship, the results indicated that it is imperative for these qualities to be valued by *both* members of the rehabilitation partnership. The elements indicated that service providers *must* keep commitments and promises to consumers and must respond to consumer questions with honesty just as service providers expect the consumers to do the same.

(6) Other Issues:

This last category was a matter of concern to participants because the elements are not always present within the rehabilitation relationship. Thus, under "Other Issues," the following categories and specific elements were judged to be critically important:

- Confidentiality and ethics:
  Consumer has right to privacy.
  Service provider has a commitment to ethical practices.
  Sessions are taped only with permission.
  Confidentiality is ensured.
  Consumer is able to discuss fears regarding confidentiality.
  Service provider maintains professional manner.
  Service provider explains limits of confidentiality.
  Service provider maintains clear boundaries.

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- Vocational issues:
  Consumer is an active participant in the job search.
- Follow-up issues:
  Service provider follows through on commitments.

Indications: Under this category, three major themes were identified as critical to an empowered rehabilitation partnership. The first focused on confidentiality and ethics. This theme was judged as extremely important by *both* consumers and service providers. The major element was that the consumer has the right to privacy. Both parties clearly felt that an empowered relationship requires that consumers have the right to keep certain parts of their lives to themselves, particularly those aspects not directly related to the purposes of the rehabilitation relationship. Clearly, both service providers and consumers have their own boundaries for the rehabilitation relationship, and these boundaries must not be violated if a partnership is to be built and sustained. Additionally, it is the responsibility of service providers to explain the purposes and boundaries of confidentiality issues as well as the possibility that outside sources, such as the legal or medical systems, may obtain records about the rehabilitation relationship. In terms of the job search process, the results showed that, as in all other aspects of the rehabilitation relationship, consumers must be active decision makers if the process is to succeed.

Summary

The inferences to be drawn from the results of this study have clear implications for creating an empowered partnership between consumers and service providers. The results provide recommendations about the effects empowered partnerships have on vocational outcomes and the quality of life of citizens with disabilities. Overall, the results show that the rehabilitation process for consumers must be a nurturing and empathetic one. It is not a short-term process. Importantly, consumers themselves must be actively included in all phases of the rehabilitation process, and their input must be actively sought. By becoming active participants in the rehabilitation process, consumers become proactive decision makers and learn to become self-directed and independent. Many individuals have long histories of "having things done to them," and of being the recipients of a service delivery model that often does not foster the self-respect and self-determination so essential for positive vocational outcomes and for an optimal quality of life. Many consumers immersed in the "system" have not had the opportunity to learn how to direct their own lives, making an empowered rehabilitation partnership difficult. It is, therefore, important that rehabilitation service providers create an environment, both physically and psychologically, that fosters empowerment.

At the conclusion of this project, several critical products will be produced. Included among those are: (1) *A Service Provider's Handbook to Consumer Involvement*; (2) *Active Involvement in Rehabilitation: A Guide for Rehabilitation Service Users*; and (3) Video tape training packages on *Consumer Involvement in Rehabilitation Partnerships*, and *Empowerment Issues for Rehabilitation Service Providers*.

On completion, this project will provide the essential information and models for rehabilitation service providers, consumers, and advocates to maximize involvement and decision making, and, thereby, to optimize the outcomes of the rehabilitation process for all parties.

References

Campbell, J.F. (1991). The consumer movement and implications for vocational rehabilitation services. *Journal of Vocational Rehabilitation, 1*(3), 67–75.

Carling, P.J. (1990). Major mental illness, housing and supports. *American Psychologist, 45*(8), 969–975.

Carney, N.C. (1991, March). Rehabilitation defined. *National Rehabilitation Association Newsletter.*

Chamberlain, J. & Rogers, J.A. (1990). Planning a community-based mental health system. *American Psychologist, 45*, 1241–1244.

Chamberlain, J., Rogers, J.A., & Sneed, C.S. (1989). Consumers, families and community support systems. *Psychosocial Rehabilitation Journal, 12*(3), 93–106.

Chandler, S.K. & Czerlinsky, T. (1992). Consumer-counselor partnerships in the rehabilitation process: Strengthening empowerment. *Momentum: Vocational and Educational Services for Individuals with Disabilities*, Fall 1992, 24–32. (The University of the State of New York, The State Education Department, VESID).

Condeluci, A. (1991). *Interdependence: The route to community*. Orlando, FL: Paul M. Deutsch Press.

Czerlinsky, T. & Chandler, S.K. (1992). *Empowerment issues for rehabilitation counselors and service providers: Seminar workbook*. Dallas, TX: UT Southwestern Medical Center, Department of Rehabilitation Science.

Czerlinsky, T. & Chandler, S.K. (1990). *Effective Consumer-Counselor Partnerships in the Rehabilitation Process*. A three-year federally funded NIDRR grant. Washington, D.C.: Department of Education.

Czerlinsky, T., Chandler, S.K., & Moore, L.M. (1991). *Consumer-counselor partnerships in rehabilitation counseling: What makes them work?* Paper presented at the 99th Annual Convention of the American Psychological Association, San Francisco, CA.

Emener, W.G. (1991). Empowerment in rehabilitation: An empowerment philosophy for rehabilitation in the 20th century. *The Journal of Rehabilitation, 54*(4), 7–12.

Frank, R. & Kamlett, M. (1985). Direct costs and expenditures for mental health care in the United States in 1980. *Hospital and Community Psychiatry, 36*, 165.

Hume, K. & Marshall, K. (1980). Implementing the rehabilitation approach in mental health settings. *Rehabilitation Counseling Bulletin, 24*(1), 61–71.

Nichols, J.L. (1990). Guest editorial: The new decade dawns: The search for quality and consumer empowerment converge. *Journal of Rehabilitation Administration, 14*(3), 169–170.

Nosek, M.A. (1992). Consumerism in the vocational rehabilitation system. *Momentum: Vocational and Educational Services for Individuals with Disabilities*, Fall 1992, 39–43. (The University of the State of New York, The State Education Department, VESID).

Prieve, K. & DePoint, B. (1987). *Making it work: Supported employment for persons with severe and persistent mental illness*. St. Paul, MN: RISE, Inc.

Schmidt, M.J. (1991). The role, function, and responsibilities of rehabilitation consumers and professionals in disability policy and law. *Journal of Applied Rehabilitation Counseling, 22*(4), 32–35.

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